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# The Dawn of Dutch

Language contact in the Western  
Low Countries before 1200

Michiel de Vaan

John Benjamins Publishing Company

## The Dawn of Dutch

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## **Volume 30**

The Dawn of Dutch. Language contact in the Western Low Countries before 1200  
by Michiel de Vaan

# The Dawn of Dutch

Language contact in the Western Low Countries  
before 1200

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## Preface

The Low Countries are famous for their radically changing landscape over the last 1,000 years. Occasionally, some remote corner of the modern urbanized landscape allows a glimpse of the landscape of the seventeenth and eighteenth centuries, but the latter were already completely different from the sparsely inhabited peat bogs, dunes and salt marshes that existed just a millennium ago. Like the landscape, the linguistic situation has also undergone major changes. In Holland, an early form of Frisian was spoken until, very roughly, 1100, and in parts of North Holland it disappeared even later. The hunt for traces of Frisian or Ingvaeanic in the dialects of the western Low Countries has been on for around 150 years, but a synthesis of the available evidence has never appeared. The main aim of this book is to fill that gap. It follows the lead of many recent studies on the nature and effects of language contact situations in the past. I have approached the topic from two different angles: Dutch dialectology in all its geographic and diachronic variation, and comparative Germanic linguistics. In the end, the minute details and the bigger picture merge into one possible account of the early and high medieval processes that determined the make-up of western Dutch.

This work concludes the research programme *The Dawn of Dutch* (2009–2014) with project number 276-70-014, which was financed by the Netherlands Organisation for Scientific Research (NWO). I am grateful to the reviewers who put faith in this project, and to Leiden University for providing me with the necessary institutional support and research infrastructure. I am also indebted to the Department of German, University of Wisconsin in Madison (USA), for inviting me as a guest researcher for two months in Autumn 2012. Many colleagues have helped me with questions small and large in the course of these past years. Wherever it seemed appropriate I have explicitly acknowledged their input. I am particularly indebted to Stephen Laker and Arjen Versloot, with whom I have discussed various sub-parts of the text and who have provided support and corrections at various stages. Of course, the usual disclaimers apply.

I also thank Hans Frede Nielsen for his willingness to incorporate this volume into the NOWELE Supplement Series, and I highly value the review work of the four external reviewers of the manuscript. They have corrected many small errors, and their suggestions have enabled me to improve the text and its organization in

several ways. Stephen Laker took it upon himself to check my English, for which I am especially grateful.

My work on the comparative historical dialectology of Dutch is greatly inspired by Jan Goossens, whom I regard as my academic long-distance teacher in this field. I hope he will forgive me the oddity of publishing these detailed discussions in English rather than Dutch or German. I dedicate this book to Anita, for sharing everything with me, and to Jakob and Willem, whose Dutch was dawning while this study was taking shape.

# Abbreviations

ACC.	accusative	MoE	Modern English
ADJ.	adjective	MoHG	Modern High German
Brab.	Brabant(ish)	MoWF	Modern Westerlauwers Frisian
C'	a palatalized consonant	ms.	manuscript
c.	century	N	North-
ca.	circa	N.	neuter
CDu.	coastal Dutch	NE	Northeast-
CNFri.	Continental North Frisian	NW	Northwest-
Dan.	Danish	NFri.	North Frisian
DAT.	dative	NOM.	nominative
Du.	Dutch	O	Old
E	East-	OBL.	oblique
enc.	enclitic	ODu.	Old Dutch
etc.	etcetera	OE	Old English
f.	feminine	OEFri.	Old East Frisian
Fla.	Flanders	OFra.	Old Franconian
Fle.	Flemish	OFre.	Old French
fn.	footnote	OFri.	Old Frisian
FÖ	Fering-Öomrang (Föhr-Amrum) Frisian	OHG	Old High German
Fri.	Frisian	ON	Old Norse
G.	German	OS	Old Saxon
GEN.	genitive	o.s.l.	open syllable lengthening
Got.	Gothic	OWFri.	Old West Frisian
Hol.	Holland(ish)	PFri.	Proto-Frisian
Ic.	Icelandic	PGm.	Proto-Germanic
INS.	instrumental	PL.	plural
Ins.	Insular	PTC.	participle
Lat.	Latin	Rom.	Romance
Limb.	Limburg(ian)	S	South-
LW	Leiden Willeram	SE	Southeast-
M.	masculine	SG.	singular
MRB	Middle Franconian Rhyming Bible	StDu.	Standard Dutch
MDu.	Middle Dutch	SW	Southwest-
ME	Middle English	Swe.	Swedish
MHG	Middle High German	W	West-
MLG	Middle Low German	WGm.	West-Germanic
Mo	Modern	WPs.	Wachtendonck Psalter
MoD	Modern Dutch		



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## Aim and scope

(...) de stelling van W. Schmidt (...): ‘First the facts and all the facts and then the theory’. Iedereen bij wiens wetenschappelijk werk de fantasie een zekere rol speelt, doet natuurlijk het tegenovergestelde en begint met een idee, dat hij vervolgens confrontereert met de feiten.  
(Heeroma 1943b: 52)<sup>1</sup>

It has long been known that significant structural differences exist between the dialects of the western provinces of Holland, Zealand, and Flanders, and the dialects of the central and eastern Low Countries. In this study I will use *coastal Dutch* to refer to the dialects of the three western provinces, and *inland Dutch* for the remaining dialects within the borders of modern Belgium and the Netherlands. The main isogloss separating coastal Dutch from inland Dutch is judged to be the absence versus the presence of secondary *i*-mutation (Goossens 1981; here § 5 and other sections). The isogloss does not exactly coincide with the eastern borders of Flanders, Zealand, and Holland, but it suffices to define those provinces as the bulk of coastal Dutch.

In order to explain the linguistic difference between coastal and inland Dutch, the early medieval history of the area has often been invoked. Many scholars have argued for the erstwhile presence of a Frisian or Ingvaeanic population which left its trace in substrate features in western Dutch. This theory implies that the coastal dialects from Flanders to Holland are the outcome of a medieval process of francoincitation, that is, of a shift from an earlier Frisian or Ingvaeanic variety to the inland variety of which the dialects of Brabant, Limburg, Utrecht, and Guelders directly derive. In this study I will use for the alleged substrate the term “Proto-Frisian”, which I borrow from Bremmer 2009: 22ff. Traces of Proto-Frisian in the later Flemish, Zealandish and Hollandish dialects will be referred to as frisanisms.

In spite of this label, I do not claim beforehand that the entire coastal area has been frisophone at some point in the Early Middle Ages. Whereas a Frisian presence from the north down to the mouth of the Rhine has been established beyond

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1. “(...) the proposition of W. Schmidt (...): ‘First the facts and all the facts and then the theory’. Everyone in whose scientific work imagination plays a certain part, of course, does the opposite, starting with an idea which is then confronted with the facts.”

doubt (see § 6.5), a genuine Proto-Frisian stage remains hypothetical for the area further south. The aim of this book is to test the hypothesis of a Proto-Frisian linguistic substrate in all the dialects of coastal Dutch. The investigation will focus on those differences which may have originated in the Old Dutch period, before 1200. Using general principles of language contact studies, the results will be interpreted in the light of historical and geographic evidence relating to the demographic history of the Low Countries.

As I explain in more detail in Section 8.2.1, the linguistic investigation will mainly be restricted to phonetics and phonology, since these aspects allow for the most insightful and the most reliable historical comparison between Frisian and Franconian. The main analytical tool will be contrastive analysis of the reconstructed phonological systems of Proto-Frisian and Old Franconian. We will follow the development of both varieties before and during the putative period of contact, roughly between 400 and 1200. The differences in phonetics and phonology between coastal Dutch and inland Dutch which have been claimed to exist, or might be argued to provide evidence for language contact between Proto-Frisian and Old Franconian, will be reviewed on the basis of a renewed examination of the evidence.

The book is structured in the following way. Chapters 2 to 4 provide some preliminary information on definitions, sources and the spelling of Dutch. Chapter 5 surveys the research history of the ‘Frisian question’ in Dutch linguistics. The methodology of the approach is explained in Chapters 6 to 8, which deal with the extralinguistic data to be taken into account, with the study of language contact, and which provide the historical-phonological developments of Frisian and Franconian in the relevant period. Chapters 9 to 21 form the core of the work. Chapters 9 and 10 focus on consonantal issues, Chapters 11 to 15 on the original short vowels, and Chapters 16 to 21 on long vowels and diphthongs. The phenomena studied in these chapters have been selected if one or more of the following criteria apply to them: (1) They have been adduced in the scholarly literature as possible instances of *ingvaeonisms* or as betraying language contact in the western Low Countries before 1200; (2) They show a geographic distribution which roughly follows the division between coastal and inland Dutch, either for all of the Low Countries or for part of them (e.g. Flanders, or North Holland); (3) They have been insufficiently studied to exclude the possibility that they are due to a geographic west-east split in the Low Countries before 1200. Finally, Chapter 22 summarizes the results and draws a more general conclusion on the reconstructed linguistic scenario.

## CHAPTER 2

# Definitions of languages and stages

The main dialects, languages and chronological stages which play a role in the discussion are the following:

<i>Anglo-Frisian</i>	The common pre-stage of the Anglo-Saxon and the Frisian dialects of West Germanic, from which, on the one hand, the dialects of English and Scots derive, and, on the other hand, those of Frisian. See Sections 8.2.3 and 8.2.4 on the reconstruction of Anglo-Frisian.
<i>coastal Dutch</i>	The language of the modern-day provinces of West Flanders (including the area now located in France), East Flanders, Zealand, South Holland and North Holland, and adjacent parts of western Antwerp, North Brabant, Guelders and Utrecht, inasmuch as they share (some of) the defining characteristics of their western neighbours.
<i>Dutch</i>	The language and dialects defined as Old, Middle and Modern Dutch, either as a whole or a subset thereof.
<i>Flanders</i>	The provinces of West and East Flanders in Belgium plus the French Flanders region in France. The derived adjective is <i>Flemish</i> .
<i>Frankish</i>	For our purposes, this denomination mainly occurs in <i>West Frankish</i> . With Frankish (called Francian in other works), I refer to the West Germanic dialect spoken by the Franks at the time of their migration into the Low Countries and Gaul, and up to ca. 800 CE.
<i>Franconian</i>	The medieval and modern dialects in the northwestern part of the Continental West Germanic dialect continuum, as far as they do not continue an Anglo-Frisian or Proto-Frisian stage. Traditionally, Franconian is contrasted with Saxon, which refers to the northern part of the Continental West Germanic dialect continuum (reflected in northeastern Dutch and Low German).
<i>Franconization</i>	The process by which speakers of a different dialect (in the framework of this study, this mainly concerns speakers of Proto-Frisian) shifted to speaking a Franconian dialect.
<i>Frisia</i>	The frisophone area in the Middle Ages, stretching along the North Sea coast from modern Zealand or Holland (cf. 6.5) to modern North Frisia.
<i>Frisian</i>	Any stage in any region of the Frisian language, defined as one of the two members of the Anglo-Frisian branch of West Germanic.

<i>Fryslân</i>	The modern-day Dutch province called, in Dutch, <i>Friesland</i> .
<i>Gelderland</i>	The Dutch province of that name which was created in 1814 and inherited the name <i>Gelder-</i> from its historical predecessor <i>Guelders</i> . Note that the town of Geldern remains outside the province.
<i>Geldern</i>	The town of Geldern, now situated in the Cleves district in Germany.
<i>Guelders</i>	The duchy (1100–1581) and province (until 1795), situated in the southeast of the Dutch linguistic area, which took its name from the town of Geldern, or, in older English, <i>Guelders</i> .
<i>Holland</i>	The historical region of that name, which emerges from history after 1100. Holland does not refer to the Netherlands as a whole.
<i>Hollandish</i>	The dialect(s) spoken in Holland after the shift of Proto-Frisian or Ingvaeanic to Franconian, which is datable roughly to the eleventh century in South Holland, and to the thirteenth century and beyond in North Holland.
<i>Hollandization</i>	The spread of the Hollandish variety to regions where it was not originally spoken. Such was the case in North Holland after 1200 (where Hollandish replaced Frisian), and in several towns in Friesland after 1500 (van Bree & Versloot 2008).
<i>Ingvaeanic</i>	Traditionally, the term Ingvaeanic is used to refer: (1) To a period in the development of the West Germanic languages, viz. a pre-stage of the varieties which come out as Frisian, Anglo-Saxon and Old Saxon; (2) To languages and dialects close to the North Sea shores, in Britain, the Low Countries, Low Germany and Denmark, at various stages in the medieval and modern periods. In this study, Ingvaeanic will only be used in citations or paraphrases of claims by other scholars.
<i>inland Dutch</i>	The language of the modern-day provinces of Vlaams Brabant, Antwerp, North Brabant (excluding the westernmost parts which share coastal Dutch features), Belgian and Dutch Limburg, Gelderland, eastern Utrecht, Overijssel, Drenthe and Groningen. Also included in this study is the Lower Rhine area around Cleves, Geldern and Xanten, up to Krefeld, which now lies in Germany.
<i>Low Countries</i>	The entire area, at any point in the last two millennia, corresponding to the modern state of the Netherlands, the northern half of Belgium, French Flanders and the Lower Rhine area in Germany. Geomorphologically, this corresponds to the western fringe of the North German Plain. Hydrographically, it encompasses the southeastern shores of the North Sea, with the lower basins of the rivers Scheldt, Meuse, Rhine, and Ems, and some smaller streams.
<i>Lower Rhine</i>	The geographic area which in modern Germany is referred to as <i>Niederrhein</i> , encompassing the districts Cleves, Wesel, Viersen, Neuss, Heinsberg, and the cities of Krefeld, Duisburg and Mönchengladbach.

<i>Middle Dutch</i>	The Germanic dialects spoken and written between 1200 and 1500 within the modern administrative borders of the Netherlands and Belgium, with the addition of some areas where Dutch no longer functions as the main language of communication. In particular, these are French Flanders (east of Calais) and the northern part of Lower Rhine (Cleves, Geldern, Wesel). I distinguish <i>Early Middle Dutch</i> (1200–1300) from <i>Late Middle Dutch</i> (1300–1500).
<i>Modern Dutch</i>	The variety which functions as a standard language in the Netherlands and the northern half of Belgium (Goossens 1985: 200). The vernacular dialects which are roofed by this standard are therefore the Modern Dutch dialects. There is a natural external linguistic border with French, and an internal one with Frisian, as spoken in most parts of the province of Fryslân. The Dutch-German state border is not a strict linguistic border as far as the dialects are concerned, but is used as an eastern limit of Dutch for practical purposes. I distinguish <i>Early Modern Dutch</i> (1500–1700) from the later varieties.
<i>North Sea Germanic</i>	This term is mostly used in a descriptive sense, referring to the West Germanic languages spoken along the North Sea coast; that is, in modern times, English, Dutch, Frisian, and Low German. It was originally coined by Maurer 1942 and understood in a historical-genealogical sense, defining a certain division of Proto-Germanic. Nowadays many scholars use the term as an alternative for Ingvaeanic. In view of its multiple meanings, I will avoid its use except for citations from other scholars.
<i>Old Dutch</i>	Strictly speaking, this concerns the Germanic dialects spoken and written between, approximately, 500 and 1200 within the modern administrative borders of the Netherlands and Belgium, plus a few adjacent areas in which Dutch no longer functions as the main language of communication, in particular, northwestern France and Lower Rhine. In citing linguistic forms, I will mainly use the collection of Old Dutch texts as acknowledged by the ONW. In particular, this includes texts written further east than the present-day Dutch border, and which could also be argued to count as Old Low or High German. The main distinction between Old and Middle Dutch is the reduction of unstressed vowels to schwa in the latter variety; this reduction took effect in the second half of the twelfth century. Secondary sources on Old Dutch are, among others, Blok 2003, Gysseling 1992, Quak 1992, Hofstra 2003, van der Horst 2008, Klein 2003, Quak & van der Horst 1997, 2002, Schoonheim 2008, Tiefenbach 2003.
<i>Old Frisian</i>	Aside from a small number of runic inscriptions, Old Frisian comprises the oldest attested stages of Frisian, until ca. 1600.

*Proto-Frisian*

The last reconstructible stage to which the various Frisian varieties (as represented in West Frisian, East Frisian, and North Frisian dialects) go back. This would have to be about the eighth century. In addition, Proto-Frisian can also refer to unattested dialects of Frisian which predate the attestation of Old Frisian in the thirteenth century.

- 1 Frysln
- 2 Groningen
- 3 Drenthe
- 4 Overijssel
- 5 Gelderland
- 6 North Holland
- 7 South Holland
- 8 Utrecht
- 9 Zealand
- 10 French Flanders
- 11 West Flanders
- 12 East Flanders
- 13 North Brabant
- 14 Antwerp
- 15 Flemish Brabant
- 16 Belgian Limburg
- 17 Dutch Limburg
- 18 Cleves/Guelders



**Map 1.** Provinces of the Low Countries

*province*

The modern administrative unit which represents the largest territorial subdivision of the states of the Netherlands and Belgium. Anachronistically, the modern names can also be used for the same geographic areas in earlier centuries, when their administrative make-up may have been very different. Map 1 indicates the position of the provinces in the Netherlands (1–9, 13, 17), Flanders (11, 12, 14–16), and two adjacent areas of France (10) and Germany (18). In the discussion of dialect features, I will often use larger geographical units, which are roughly made up of several of the modern provinces taken together. This is the legend to Map 1:

*Flanders:* 10+11+12

*Brabant:* 13+14+15

*Limburg:* 16+17

*Holland:* 6+7

*western Dutch = coastal Dutch:* 10+11+12+9+7+6, sometimes also the western half of 8 and the westernmost part of 13

*inland Dutch:* 3+4+5+8 (east)+13+14+15+16+17+18, after 1400 also +2

*northeastern Dutch:* 3+4+5, often +8 (east), after 1400 also +2

<i>Rhine delta</i>	The area along and between the Rhine, its affluents and its branches (Waal, Lek and IJssel) west of the modern Dutch-German state border.
<i>Ripuarian</i>	The modern dialects spoken in Germany between the Benrather Line in the north (the isogloss <i>p/t/k &gt; f/ts/ch</i> ) and the <i>dorp/dorf</i> isogloss in the south. Linguistically, Ripuarian is a Middle Franconian dialect situated between Low Franconian in the north and Moselle Franconian in the south. Geographically, Ripuarian encompasses the area west of the Rhine between the Lower Rhine and the Eifel, including the cities of Aachen, Cologne and Bonn. East of the Rhine, a large part of the Land of Berg belongs to Ripuarian.
<i>Saxon</i>	The medieval and modern dialects in the northern part of the Continental West Germanic dialect continuum, as far as they do not continue an Anglo-Frisian or Proto-Frisian stage. The exact meaning of the term depends on time and tradition. Krogh (2013) defends the independent linguistic status of Old Saxon as different from Old Franconian. The term Saxon is also used traditionally for northeastern dialects of Dutch. Goossens 2008: 20–62 argues at length that it is impossible to reliably define <i>Nedersaksisch</i> [“Low Saxon”] as opposed to <i>Nederfrankisch</i> on the basis of the modern dialect.
<i>West Friesland</i>	The northern part of North Holland, east of Alkmaar, which is traditionally referred to as <i>West-Friesland</i> in Dutch usage. The local term for the Hollandish dialect of this area is <i>Westfries</i> , which we shall not use.
<i>West Frisian</i>	The standardized Frisian language of <i>Fryslân</i> will be called <i>Modern West Frisian</i> . If a reference to the western part of medieval Frisia in general is meant (be it only in <i>Fryslân</i> or also in what is now West Friesland), or to its language, I will use <i>Westerlauwers Frisia(n)</i> .
<i>West Germanic</i>	The last reconstructed stage of language from which English, Frisian, Dutch, German and all their dialects have inherited their common features. A guess (for it is only a guess) as to the time when the West Germanic unity broke up is around 200 CE.



## Sources

Investigation of the early history of Dutch requires handling a larger number of different sources.

### 3.1 The Old Dutch corpus

The selection and dating of the Old Dutch corpus follows the *Oudnederlands Woordenboek* (ONW), which appeared online in 2009. I have also used the Old Dutch corpus, made by the *Instituut voor Nederlandse Lexicologie* in Leiden, which served as the input for the online version (online at gtb.inl.nl). The corpus offers the complete evidence as far as appellatives and toponyms are concerned, but personal names are only subsumed inasmuch as they concern surnames derived from appellatives.

The Old Dutch corpus consists of the following sources (I refer to the ONW for references on the scholarly editions of the texts):

- a. The *Malberg glosses* in the *Lex Salica* and the *Pactus Legis Salicae*. This is the oldest material which can with some right be regarded as reflecting non-Frisian dialects spoken in the Low Countries, roughly dated by ONW between the years 507 and 768. In the Latin text of this legislation of the Salic Franks, the juridical terms describing the crime or offense are often given in their vernacular form, or rather, in a very deformed version of the original vernacular word. The manuscripts were copied in the Carolingian period by scribes who spoke a Romance dialect. For many of the glosses, it is very hard to tell what the original Frankish term must have been. The Malberg glosses have been integrated in the online version of the ONW since April, 2012. For nearly each gloss, Arend Quak has written an extensive commentary. Some recent studies on selected words are Quak 2008a, 2008b, and Seebold 2007a, 2007b, 2007c, 2008, 2010.
- b. There is a small number of short formulas and sentences from various centuries which may be considered Old Dutch or close to it: the Westphalian horse and worm blessing (891–900), the Utrecht baptismal vows (791–800; *Forsachistu diabolae* etc.), the Nederberg baptismal vows (811–812; *Pompas autem nos dicimus siniu gelp ando sinan uiilleon*), the Northern Lower Rhine blood blessing (1001–1050), the Rochester poem (1083–1110; *Hebban olla uogala nestas [h]*

*agunnan hinase hi[c] [e]nda thu u[uat] [u]mbida[n] [uu]e nu), and a sentence from Munsterbilzen (1130; *Tesi samanunga vvas edele. Unde scona*).*

Due to the symbolic status and the literary character of the Rochester poem, it has been much discussed since its discovery in 1932. The following reading is by Louwen 2009: 77:

*Hebban olla uogala nestas hagunnan  
hinase hic enda thu  
uuat umbidan uue nu*

The text may be regarded as the translation of the Latin text *Abent omnes uolucres nidos incepitos nisi ego et tu. Quid expectamus nunc* ‘All the birds have started (building) nests except for me and you. What are we waiting for?’, which is written on the same folio.

In recent years, the discussion has focused around the status of these lines as either Old Dutch or Old English, or both. Cotman & Taeldeman 2003 argue that the lines were Old Flemish, but de Grauwé 2004 concludes that they could just as well have been “intended as Kentish” with a West Flemish substrate (p. 53). His main argument was that there are hardly any characteristics that allow us to decide between an Old Kentish and an Old Flemish origin, and that an English place of writing might be considered more likely. Kwakkell 2005, however, established that the hand that wrote the lines was a continental one, and Louwen 2009 concluded that the language was a mixture of Kentish and Flemish. In my view, the non-English characteristics of the text, such as the 3PL. ending *-an*, are a strong indication for Flemish origin, and they weigh heavier than the alleged non-Flemish features that could point towards an English origin. But the matter hinges on very little material, so future finds may well change our views on the Rochester poem once more.

- c. The *Wachtendonck Psalter* and its glosses (ca. 901–1000). This is the oldest of the three longer texts of the Old Dutch corpus. It is a translation of the Latin Vulgate, and it seems to first have been written in a Middle Franconian dialect before it was reworked into an eastern Low Franconian one. No medieval manuscripts with the text survive. All that we have exists in copies and letters from the modern era. See Kyes 1969 and Quak 2010 for the philological problems involved in the study of these texts.
- d. The *Leiden Willeram* (ca. 1100). This is an Old Dutch translation-plus-reworking of the High German translation-plus-commentary by abbot Willeram of Ebersberg of the Song of Songs made in approximately 1059–1065. The Dutch remake was probably done in the Egmond monastery in North Holland. At the end of the sixteenth century, the manuscript ended up in Leiden University Library. The text shows a mixture of High German features which were retained from the original with Old Dutch features which the Egmond translator must

have introduced. Initially, it was thought that the dialect of the Leiden Willeram author was Ripuarian or Moselle Franconian, but scholars now think that he spoke the dialect of North Holland, as evidenced by some features which may be explained as Frisianisms. See Sanders 1971 for an edition and Sanders 1974 for a linguistic study of the Leiden text. Klein 1979 provides an analysis of the pronouns and Schwager 2014, a graphemic analysis.

- e. The Middle Franconian Rhyming Bible (1151–1200). This is the third substantial text in Old Dutch. Actually, it was probably written in Werden an der Ruhr in Westphalia, so that the term ‘Old Dutch’ is somewhat misleading. The language of the text cannot be far removed from what was spoken in the southeast of the Low Countries. This text, too, has some High German features, for which see Klein 2003.
- f. Vernacular glosses in Latin texts, such as the Reichenauer glosses (750), a list of pagan practices (791–800), the northeast Lower Rhine Prudentius glosses (951–1000), the Orosius glosses from St. Omars (1001–1100), the names of months and winds from Holland or Utrecht (1046–1100), and the Letterswerve fish names (1159–64).
- g. Place-names. The toponyms from documents until 1225 have been collected comprehensively in Gysseling 1960a (for the Benelux, northern France and western Germany), and those until 1200 also in Künzel, Blok & Verhoeff 1989 (for the Netherlands). The etymology of toponyms which are only attested after 1200, many of which have roots in the Old Dutch period, can be studied with the help of Debrabandere et al. 2010 for Flanders, van Berkel & Samplonius 2006 for the Netherlands, and by searching the extant corpora of Middle Dutch non-literary documents.
- h. Personal names. Many personal names are attested in several hundreds of compound place-names of the type *Babanpol* ‘Babe’s pool’, *Alerdeskirka* ‘Alard’s church’, etc. (Gysseling 1966a). ONW only includes simplex names when they are surnames which (also) occur as appellative nouns, as in *Wouterus Alf* ‘Walter Alf’, *Riquidus blauot* ‘Richard bluefoot’, etc. All personal names in the documents from the abbeys of Ghent are studied in Mansion 1924 (for the period until 1000) and Tavernier-Vereecken 1968 (1000–1253). The latter gives a very complete discussion of all attestations. The *Antroponymisch Woordenboek*,<sup>2</sup> which intends to provide the full anthroponymic evidence of Old Dutch, was not yet online when this book was written. The names from other regions (as would occur, e.g., in the *Fontes Egmundenses* for North Holland) have not been systematically collected and are left out of this study.

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2. <http://www.antroponymischwoordenboek.be/>; see also Soudan & van Loon 2009.

ONW also includes the Runic inscriptions from between 500 and 900 which were found in Frisian territory, viz. in Britsum, Arum, Westeremden, Toornwerd, Raskwerd, Bernsterburen, and Oostum. Yet ONW explicitly calls some of these Old Frisian, whereas all of them *may* be Old Frisian. Thus, they fall outside the scope of a strictly defined Old Dutch. Only the inscription *habubuwas ann kusjam loguns* from Bergakker (401–410) in the Betuwe is geographically in the right place, but it is so old that it can almost count as Common West Germanic (cf. Bammesberger 1999).

### 3.2 The Middle Dutch corpus

Due to the availability of the *Vroegmiddelnederlands Woordenboek* (VMNW), which covers the thirteenth century, I have found it useful to distinguish Early Middle Dutch (1200–1300; note that this date differs slightly from Pijnenburg 1997, who dates Early Middle Dutch from ca. 1200–1350) from Late Middle Dutch (1300–1500; compare the dating from ca. 1350–1550 in Willemyns 1997). The VMNW is built on the collection of texts known as the *Corpus Gysseling* (CG) which was edited in 1977 and 1980. Because the thirteenth century is the first century in which vernacular texts start to be produced in substantial numbers from a range of geographically identifiable places, the reader will often find that I base my discussion of linguistic features on their occurrence and distribution in the Early Middle Dutch corpus. The VMNW was finished in 1998. Since then, a few additional texts have been found. One might dispute the omission of some other texts from the VMNW (e.g. the *Limburgse Sermoenen*). I have not systematically taken those texts into account in dealing with the thirteenth century.

The *Middelnederlandsch Woordenboek* (MNW) is very different from VMNW, in that it was compiled in the nineteenth century with the aim of describing the Middle Dutch language from 1200 to 1500. Thus, the choice of texts is necessarily eclectic. Also, MNW has a strong bias towards literary texts. Medieval literary texts can rarely be ascribed to one single geographic point, unlike charters and other official texts. Yet ascribing a particular phenomenon to a local or regional dialect will often appear fundamental in our linguistic discussion. Furthermore, MNW largely depends on nineteenth-century critical editions of the texts, which often have regularized spellings. This reduces their value in dealing with phonological issues. Still, for the fourteenth and fifteenth century, no alternative, comprehensive and searchable representative corpus is available, so that I will use MNW to pass approximate judgements over certain features and their distribution in Middle Dutch. To be sure, various scholars are making efforts to fill the corpus gap of Middle Dutch, and it may be hoped that soon a decent alternative to MNW will be available.

Online, one can already find some partial corpora. An eclectic corpus of non-literary texts from the fourteenth century is CRM14, which has good coverage of

all regions of Dutch. Another searchable corpus is the *Digitaal Oorkondenboek Groningen en Drenthe* at [www.cartago.nl](http://www.cartago.nl), which contains all charters from those two provinces until 1600. Some other corpora can be found via the website of the Huygens Institute in The Hague ([resources.huygens.knaw.nl](http://resources.huygens.knaw.nl)). The website of the *Digitale Bibliotheek voor de Nederlandse Letteren (DBNL)*, at [www.dbl.org](http://www.dbl.org)) focuses on literary texts from all periods of Dutch. It can be searched and it uses the most recent editions available.

### 3.3 The Modern Dutch corpus

The Modern Dutch corpus (1500 to present) is accessible online through the *Woordenboek der Nederlandse Taal (WNT)*, which was started in the 1800s but was completed only in 2001. Hence, the content and quality of the entries vary, but in general, the citations provided by the *WNT* give a reliable impression of the semantics and morphology of Dutch words, and of the period when they were most used in literary texts. Since the language underwent increasing standardization in the course of the seventeenth and eighteenth centuries, and since books were printed mainly in Holland and Flanders, the *WNT* corpus has a distinct bias towards western Dutch. The same is true for the Modern Dutch texts collected in *DBNL*, which represents an improvement with regard to *WNT* inasmuch as it contains many more texts, such as the corpus of Early Modern Dutch songs and many plays, and is fully searchable. An important separate corpus for investigating the language of what became the Dutch standard, is the collection of Bible translations at [www.bijbelsdigitaal.nl](http://www.bijbelsdigitaal.nl).

Hand-written texts from after 1500 are not systematically collected anywhere. Since the language of charters and other official documents became standardized after 1600, they are not very important for the study of regional variation. But ego-documents are known to preserve many regional and local features at all periods, such as the *Sailing Letters* from the 1600s and 1700s.

### 3.4 Dialects of Modern Dutch

The distribution of variants in the dialects of Modern Dutch has been charted since the second half of the nineteenth century. See van der Sijs, van Reenen & Rem 2013: 211–13 for a brief survey of dialect enquiries of Dutch, and Kruijzen & van der Sijs 2010 for a more detailed discussion of the different dialect enquiries, regional dictionaries and dialect atlases of Dutch and the adjacent areas of Germany. The present investigation is based on the dialect surveys which are electronically available. Winkler's dialect survey of the early 1870s is available online at *DBNL*.

The data from the Willems Survey of the 1880s can be consulted online at <http://bouwstoffen.kantl.be/>, which is searchable and provides scans of the hand-written enquiry forms. The Schrijnen, van Ginneken & Verbeeten enquiry (SGV) of 1914, which focused on southern Dutch, has been made accessible on the CD-Rom which accompanies Kruijsen 2006. The data from the 150 phrases and words in the *Reeks Nederlandse Dialectatlassen* (RND), published in separate volumes between 1925 and 1982, and which treats all Dutch dialects in a dense net, only became available online in 2016,<sup>3</sup> but I have on occasion consulted them to answer specific questions. The most recent, full-scale dialect investigation is the *Goeman, Taeldeman & van Reenen Project* (GTRP). Its data were collected between 1980 and 1995, and it focuses on phonology and morphology (Goeman & Taeldeman 1996).<sup>4</sup> The GTRP has resulted in the publication of the *Fonologische Atlas van de Nederlandse Dialecten* (FAND) and the *Morfologische Atlas van de Nederlandse Dialecten* (MAND; see the bibliography for references). The raw data on which the FAND and MAND are based can be consulted online at [www.meertens.knaw.nl/mand/database/](http://www.meertens.knaw.nl/mand/database/), and I have made frequent use of them. The application at [www.meertens.knaw.nl/kaart/](http://www.meertens.knaw.nl/kaart/) allows each researcher to make his own dialect maps of the Dutch linguistic area.

There have been other dialect surveys, most of them in written form, which were distributed in part or all of the Dutch area for specific research questions. Most of these were issued by the dialect institutes of the universities of Groningen, Nijmegen, Ghent and Leuven, or by the P. J. Meertens Institute in Amsterdam. A number of dialect maps which were made on the basis of these surveys, but which were never published, can be found at *Kaartenbank* ([www.meertens.knaw.nl/kaartenbank/](http://www.meertens.knaw.nl/kaartenbank/)), together with a large number of published maps. Other online resources are the dialect atlases of Flanders (WVD), Brabant (WBD), Limburg (WLD) and Zealand (WZD), which are partly based on the dialect surveys mentioned above. For Brabant<sup>5</sup> and Limburg<sup>6</sup> only part of the vocabulary has been made accessible online, viz. the “general vocabulary”, as opposed to the “professional vocabulary” of agriculture and craftsmanship. The data from Zealand can be found indirectly through the *Woordenbank van de Nederlandse Dialecten* ([www.woordenbank.be](http://www.woordenbank.be)), whereas the Flemish data are indexed and linked to the published pages of the WVD at [www.wvd.ugent.be/register/](http://www.wvd.ugent.be/register/). The *Woordenboek van de Achterhoekse en Liemerse dialecten* is searchable online at [www.ecal.nu](http://www.ecal.nu), the *Woordenboek van de Overijsselsche dialecten* at [www.onderzoekoverijssel.nl](http://www.onderzoekoverijssel.nl), and the *Woordenboek van de Drentse dialecten* (Kocks 1996–2000) is searchable online at [woorden.huusvandetaol.nl](http://woorden.huusvandetaol.nl).

3. At <http://www.dialectzinnen.ugent.be/transcriptions/>.

4. See also <http://www.meertens.knaw.nl/projecten/mand/GTRPdata.html>.

5. At <http://dialect.ruhosting.nl/wbd/>.

6. At <http://dialect.ruhosting.nl/wld/>.

Other dialect evidence can be retrieved from printed publications, which are then referenced. For our purposes of tracing the history of coastal Dutch, it is important to note that the vocabulary of Flanders, Zealand and South Holland below the Meuse is well described in *WVD* and *WZD*, as well as in de Bo 1892 and several local dictionaries. North Holland north of the River IJ is treated in detail and with specific attention paid to archaic words in Boekenoogen 1897 (of which Boekenoogen 2004 is a reprint with very minor additions) and Pannekeet 1984, but for South Holland between Rotterdam and Amsterdam, we lack a lexicological work of similar scope and quality. For this area, then, we must mainly rely on the data from the various dialect surveys, which often disregard the less frequent vocabulary.

### 3.5 Onomastics

The state of Old Dutch onomastics has been sketched above. From the twelfth century, Christian names start to replace Germanic names as first names, so that names lose much of their importance for this investigation. Still, for specific morphological questions, such as the development of the diminutive suffix, first names render important information in Middle and Modern Dutch. *A priori*, surnames represent the most interesting onomastic evidence for the history of the vocabulary. Surnames can be derived from first names (*Janssen, Peeters*), from toponyms (*van Helden*, lit. ‘from [the village of] Helden’, *Brusselmans* ‘[son of someone] from Brussels’, *van der Hoek* ‘from the corner’, *Ten Kate* ‘at the farmstead’), from professions (*Bakker* ‘Baker’, *Schreurs* ‘Taylor’s’), and from personal qualities (*de Goeij* ‘the Good’, *Zwart* ‘Black’). The surnames develop according to the changes of the regional dialect and hold much information about the linguistic history of Dutch since ca. 1200.

Apart from the corpus of Middle Dutch literary names, which is of little relevance to us, there is no corpus of given names from before the twentieth century. Yet the registers of several regional archives have been indexed and they can be searched for the occurrence of a specific name.

For modern surnames there are two electronic databases, one for the Netherlands (*Nederlandse Familienamenbank* at [www.cbgfamilienamen.nl/nfb/](http://www.cbgfamilienamen.nl/nfb/)) and one for Belgium (at [www.familienaam.be](http://www.familienaam.be)). The former database includes brief, eclectic explanations for only a subset of the names. The surnames occurring in Belgium have been discussed as to their origin and spelling variation in the dictionary by Debrabandere 2003. Among the older studies into the etymology and spread of surnames, the most valuable ones are Winkler 1885 (reedited as Winkler & Nijen Twilhaar 2007), Boekenoogen 1897: lxxxix–cxviii, and van der Schaar 1953. More recently, the methodology of Dutch surname onomastics has been refined as regards the interpretation of the regional spread of names and the etymological explanations. Relevant investigations are Goossens 1978, 1996a, van Loon 1980, 1981, Marynissen

1994, 2002, 2011, Marynissen & Nübling 2010. Reliable introductions to this topic are Ebeling 1993 and Debrabandere 2012. An introductory survey for each Dutch and Belgian province is provided by the contributions in De Tier & Marynissen 2001.

Western Germany is also relevant for the interpretation of Dutch names. The modern spread of surnames in Germany can be investigated through the website *Geogen* (<http://christoph.stoepel.net/geogen/en/Default.aspx>). Kunze 2003 is an excellent atlas with many examples and ample background information and/or metadata.

### 3.6 Low German

As there was no linguistic border between the Netherlands and Germany until the twentieth century, Low German is an important comparandum for the study of Dutch. The oldest phase is usually termed Old Saxon, and its vocabulary is now accessible in Tiefenbach 2010. The grammar is treated in Gallée 1993, and Schlaug 1955 and 1962 collect many of the Old Saxon personal names.

For the vocabulary of the Middle Low German period, I have mainly used Schiller & Lübben 1875–81, which is accessible online. A reliable corpus of Middle Low German, comparable to the CG for Early Middle Dutch, is a gap that will eventually be filled by the projected *Referenzkorpus Mittelniederdeutsch / Niederrheinisch* (see Peters & Nagel 2014). For the grammar of Middle Low German, Lasch 1914 and Sarauw 1921 are especially useful for phonological issues, while morphology is the main concern in Sarauw 1924. Modern Low German dialects are represented by several regional dictionaries, such as those of Westphalia, of Low Saxony, of Mecklenburg-Vorpommern, and other regions.

### 3.7 High German

The most important comparandum for Dutch are the dialects of Ripuarian and Moselle Franconian, the vocabulary of which is collected in *Rheinisches Wörterbuch*. The medieval language is available in the dictionaries of Old High German, for which also the *EWAhd*, which has reached the letter *l*-, is an important and very detailed source. For the grammar of Old High German, see Braune & Reiffenstein 2004. The Middle High German vocabulary can be retrieved through the *Mittelhochdeutsches Wörterbuch Online* ([www.mhdwb-online.de/index.html](http://www.mhdwb-online.de/index.html)) and extra attestations can be found in *Deutsches Rechtswörterbuch* ([drw-www.adw.uni-heidelberg.de/drw/](http://drw-www.adw.uni-heidelberg.de/drw/)), specifically for legal texts (finished as far as *s*- in early 2015). The language of Modern High German until the middle of the nineteenth century is found in Grimm's *Deutsches Wörterbuch*. A number of regional dictionaries of the High German dialect area can be consulted online at [www.regionalsprache.de](http://www.regionalsprache.de).

### 3.8 Frisian

The Old Frisian corpus can easily be consulted using Hofmann & Popkema 2008. Evidence from later centuries of Westerlauwers Frisian can be found in the *Integrated Frisian Language Database* at <http://tdb.fryske-akademy.eu/tdb/index-en.html>. The modern vocabulary is incorporated in the *Wurdboek fan de Fryske Taal / Woordenboek der Friese Taal* at the INL website. Dialect data for Modern Westerlauwers Frisian are included in the GTRP dataset, and on occasions they were taken from monographs and local or regional dictionaries such as Hof 1933, Spenter 1968, and others. Relevant toponymic evidence is collected in Gildemacher 1993, 2007, 2008.

Dialect material from modern East and North Frisian was not systematically included, but was adopted from a variety of sources.

### 3.9 Old French

Since we have so few actual Old Dutch texts, borrowings from Old Dutch or Old Franconian into Old French are a potentially valuable source of information. A recent and reliable monograph on this issue is a desideratum. In general, the topic has been addressed more often by Romanists than by Germanicists. See von Wartburg 1971: 56–60, Stefenelli 1981, Holtus 1990: 520–21, Pfister 1998 and Haubrichs & Pfister 1998: 252–61 for eclectic surveys.

As to the appellative vocabulary, ONW incorporates French words that were included by von Wartburg in volumes 15 to 17 of his *Französisches etymologisches Wörterbuch* (1922–2003). Many topics were also discussed by Gamillscheg 1970. The French toponyms of Germanic origin can be found in Nègre 1990–98.



## The spelling of Dutch

Little research has been devoted to the rise of Dutch spelling system(s) in the Old Dutch and Early Middle Dutch period. Even for Late Middle and Early Modern Dutch, most attention has focused on spelling norms and spelling debates rather than on the actual variation in a larger corpus of texts. In general, we observe the slow increase of vernacular writing in the eleventh and twelfth centuries, first in names, then in small phrases, and, finally, in longer coherent texts. Depending on one's point of view, one may stress the remarkable similarity in the solutions chosen by different people in different regions for the application of the Latin alphabet to Dutch, or one may emphasize the likelihood of multiple origins of Dutch writing. The two main areas in which Dutch vernacular writing began seem to have been the southeast (Limburg, Cleves/Guelders) and the southwest (Flanders). In the southeast, literary production starts around 1200 with the *Servatius* fragments, the *Aiol* and the fragments of the romance *Floris ende Blanchefloir*. In Flanders, non-literary texts are first preserved from the 1230s, with some indications of slightly earlier beginnings. As is to be expected, the writing system of the southeast is close to that of Ripuarian (also to northeastern Old French?), whereas the Flemish spellings have more in common with those of Old French in Picardy (Pijnenburg 1997: 76–77), e.g., in using <u> for /y/, <gh> for /g,γ/ before front vowels, and <ou> for /u/. The external history of the shift from Latin or Old French to Dutch has been treated in a number of recent publications, including Gysseling 1971, Burgers 1996, Croenen 1999, Dijkhof 1999, Beyers 2000, Vanhoutte 2002, Dijkhof 2003.

A general introduction to the application of the Latin alphabet to the spelling of (Early) Middle Dutch is Goossens 1997. He concentrates on the deviations between the phonemic systems of Latin and of the Dutch dialects, and on the ways in which different regions have tried to remedy the shortage of Latin vowel graphemes. Quak & van der Horst 1997: 42–43 offer some general remarks on the spelling in Old Dutch documents, such as the occasional occurrence of <ht> instead of <th> to render /þ/, and the sporadic vowel doubling to indicate long vowels, as in *Heembeke* ‘Hembeke’. Pijnenburg 1997: 75–78 argues that Middle Dutch spelling stems from “at least” two different spelling traditions, viz. a Middle High German one, which is mainly reflected in the literary tradition of Limburg and Cleves/Guelders, and a North French and Picardian one, which was followed mainly in Flanders. For instance, <u> indicates /u/ in southeastern Middle Dutch, as it does in High German, whereas the same sign is used for /y/ in Flanders, as it is in French orthography.

In fact, the same geographic division can already be observed in the Old Dutch period. The Wachtendonck Psalter and the Leiden Willeram both have a High German model, and the former was written probably not far from the Benrather Line, maybe in Munsterbilzen in southern Limburg (Quak 2010: 72). As for the toponymic evidence, the early medieval attestations (until ca. 1000) show more or less direct influence from Latin spelling, whereas Late Old Dutch names, especially in the southern Low Countries, are closer to the Old French system. Of course, the transition from Latin to French is a fluid one. Thus, the voiceless velar fricative /χ/, which later became /h/, is rendered by <ch> in early (Merovingian) names. Initial *sl-* and *sn-* can be spelled as <scl->, <scn-> in Old Flemish (*Sclota*), which Tavernier-Vereecken 1968: 591f. explains as a Romance spelling habit. This spelling peculiarity persists until the Late Middle Dutch period, cf. van Loey 1976: 90, de Vaan 2007: 316–7. Other examples are the sporadic use of <g> for /j/ (e.g. *Agnardus* beside *Ainardus*, *Einhardus*, Mansion 1924: 135), and of <ch> for /k/ (*Wivechin* /wivekin/). The sign <z> used for /ts/ and /dz/ in Old Dutch belongs both to the Old French and to the Old High German system.

Van Loey 1976 provides a wealth of data on Middle Dutch spellings, but his treatment is selective and rather brief. The most detailed study of a Middle Dutch graphemic system is that of the Ghent leprosy documents of 1236–37 by Larsen 2001. Other detailed studies which include graphemics are those of Goossens 1992a for the *Servatius* fragments (ca. 1200), of de Man & van Sterkenburg 1977: 55–80 for the *Glossarium Bernense*. Mihm 2001 is a comparative and methodological study of the graphemic systems of several Low German, Ripuarian and Low Franconian texts from the twelfth and thirteenth century. A number of issues remain disputed, such as: the question of whether <gh> indicates palatality of the velar stop/fricative, or whether it was used, on the contrary, to indicate that /g/ was not palatalised or assibilated; the question of the origin, date, spread and phonetic reality of <e> and <i> as length markers for long vowels; the question about the backness or frontness of the rounded vowels signalled by <u> and <o>. Wherever relevant, these questions will be discussed in the chapters below.

In the running text of the content chapters below, I will often use the orthography of Modern Dutch in italic script in order to refer to the pronunciation and/or phonemic value of Dutch (dialect) words (except when vowels are preceded by an asterisk or put between phonetic brackets or phonemic slashes, in which case IPA signs will be used). Thus, a statement “*boer* became *buur*” refers to a phonemic reality “/bu:r/ became /by:r/”.

The grapheme-to-phoneme value of the Modern Dutch vowels and consonants is indicated by Tables 1 to 3. The trigraphs *aai*, *ooi*, *oei*, *auw*, *ouw* represent predictable combinations of the initial digraphs plus /i/ or /w/. The tetragraphs *ieuw*, *eeuw* represent combinations of /i/ and /e/ plus /w/.

The consonants present fewer complications than the vowels, at least at the phonemic level, and disregarding word-internal sandhi and the use of consonant

graphemes in modern loanwords from French, English, and other languages. The most important distributional rules are that geminate digraphs (<bb>, <mm>, etc.) are identical in value and pronunciation to singulates, and that word-final voiced obstruent graphemes represent a voiceless pronunciation in isolation.

Table 1. Simple vowel graphemes of Modern Dutch

Grapheme	Phoneme	Pronunciation	Examples
<i>	/ɪ/ (in closed syllable)	[ɪ]	<i>kist</i> ‘chest, box’, <i>pittig</i> ‘crisp, racy’
<e>	/ɛ/ (in closed syllable)	[ɛ]	<i>pet</i> ‘cap’, <i>petten</i> ‘caps’
<e>	/e/ (in open syllable)	[e.]	<i>Peter</i> ‘Peter’
		[e:] before <i>r</i>	<i>peren</i> ‘pears’
<a>	/a/ (in closed syllable)	[a]	<i>kat</i> ‘cat’, <i>katten</i> ‘cats’
<a>	/a/ (in open syllable)	[a.]	<i>kater</i> ‘tom-cat’
		[a:] before <i>r</i>	<i>schar</i> ‘host, band’
<u>	/œ/ (in closed syllable)	[œ]	<i>nut</i> ‘use’, <i>nuttig</i> ‘useful’
<u>	/y/ (in open syllable)	[y.]	<i>kluten</i> ‘pied avocets’
		[y:] before <i>r</i>	<i>huren</i> ‘to rent’
<o>	/ɔ/ (in closed syllable)	[ɔ]	<i>bot</i> ‘bone’, <i>botten</i> ‘bones’
<o>	/o/ (in open syllable)	[o.]	<i>boten</i> ‘boats’
		[o:] before <i>r</i>	<i>boren</i> ‘to drill’

Table 2. Vowel digraphs of Modern Dutch

Grapheme	Phoneme	Pronunciation	Examples
<ij>	/ɛj/	[ɛj]	<i>spijt</i> ‘remorse’
<ie>	/i/	[i]	<i>ziet</i> ‘sees’
		[i:] before <i>r</i>	<i>zwier</i> ‘elegance’
<ee>	/e/ (in closed syllable or absolute auslaut)	[e.]	<i>kreet</i> ‘slogan’
		[e:] before <i>r</i>	<i>peer</i> ‘pear’
<ei>	/ɛi/	[ɛj]	<i>meid</i> ‘girl’
<eu>	/ø/	[ø]	<i>leut</i> ‘fun’
		[ø:] before <i>r</i>	<i>kleur</i> ‘colour’
<aa>	/a/ (in closed syllable)	[a.]	<i>raat</i> ‘honeycomb’
		[a:] before <i>r</i>	<i>raar</i> ‘strange’
<au>	/aw/	[aw]	<i>saus</i> ‘sauce’
<oo>	/o/ (in closed syllable)	[o.]	<i>boot</i> ‘boat’
		[o:] before <i>r</i>	<i>boor</i> ‘drill’
<oe>	/u/	[u]	<i>roet</i> ‘soot’
		[u:] before <i>r</i>	<i>boer</i> ‘farmer’
<ou>	/aw/	[aw]	<i>zout</i> ‘salt’
<uu>	/y/ (in closed syllable)	[y]	<i>kluut</i> ‘pied avocet’
		[y:] before <i>r</i>	<i>huur</i> ‘rent’
<ui>	/œy/	[œy]	<i>kruit</i> ‘gunpowder’

**Table 3.** Main consonant graphemes of Modern Dutch

Graphemes	Phoneme	Graphemes	Phoneme	Graphemes	Phoneme
<p>, <pp>	/p/	<t>, <tt>	/t/	<k>, <kk>	/k/
<b>, <bb>	/b/, -/p/#	<d>, <dd>	/d/, -/t/#	<g>, <gg>	/ɣ/, -/x/#
<f>, <ff>	/f/	<s>, <ss>	/s/	<ch>	/x/
<v>	/v/	<z>, <zz>	/z/	<ng>	/ŋ/
<w>	/w/	<n>, <nn>	/n/	<h>	/h/
<m>, <mm>	/m/	<j>	/j/		

## CHAPTER 5

# History of research on the ‘Frisian question’ in Belgium and the Netherlands

*Inghels was Willebroert becant  
Gheboren van Noorthumberlant  
Ende want de Ingels sijn gewassen  
Als men leest, van Nederzassen  
Conste hi de bet de Vriessche tale  
Dat mach elc man proeven wale<sup>7</sup>*

Melis Stoke, *Rijmkroniek* (ca. 1300, Holland), lines 127–132

The different character of western Dutch when compared with central and eastern dialects has been commented on since the nineteenth century. One of the most striking aspects of the ongoing discussion is the variation in the terminology applied to the putative pre-Franconian layer in coastal Dutch. In the present survey, I will focus on the discussion as it has developed in the Netherlands and Flanders. General surveys of the “Inguaeonic discussion” – as far as it applies to the Low Countries and Low Germany and has been carried on in German, English and other languages – can be found in Schults Garfinkle 1975, van Bree 1987, Krogh 1996 and Nielsen 2000b.

### Winkler

A physician by education but a philologist by vocation, Johan Winkler (1840–1916) had grown up in Leeuwarden. This may explain why he became, in the words of Meertens (1958: 5), a “Frisomaniac”, who studied and promoted the Frisian language. He was adamant that “Netherlandish” did not equal “Hollandish”, and that Hollandish dialects were no better or more valuable than other dialects. In 1870, he starts collecting as many dialectal renderings as possible of the parable of the Prodigal Son. Winkler 1874 introduces and illustrates 186 “Nederduitsch en

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7. English Willebrord knew well. / [As he was] born of Northumbria, / – for the English have sprung from Lower Saxony, as one reads –/ he knew the Frisian language rather well: everyone can understand that well.

Friesch” dialects from northern Germany, the Netherlands, Belgium and France.<sup>8</sup> It is the first comparative dialect survey of Dutch and Frisian dialects, and still a valuable source of information about traditional dialects. In the introduction to the chapter on North Holland, Winkler (1874 II: 1–6) elaborately discusses the dialectal position of Hollandish in general. According to him,

uit een dialectologisch oogpunt genomen moet noordelijk Noord Holland of West-Friesland als een voortzetting van de provincie Friesland worden beschouwd, behooren de tongvallen van Kennemerland en Amstelland tot Zuid-Holland en maken de tongvallen van het Gooiland, even als de daar aan nauw verwante dialecten van de provincie Utrecht, een overgang van de hollandsche (friso-frankische) tot de zuiver frankische tongvallen uit.<sup>9</sup>

He (p. 4–6) even provides a full-fledged theory of the contact origins of modern Hollandish. The rhetoric is outdated and frisocentric, many facts are wrong, and the core claim was already contested in the year the work appeared (by Cosijn 1874), but the idea that Holland once spoke Frisian and later shifted to Franconian has stood the test of time. To Winkler, the colloquial language of Holland is “een, eerst in betrekkelijk laten tijd ontstaan mengelmoes van friesch en nederduitsch, van westerlauwersch-friesch en frankisch-nederduitsch.”<sup>10</sup> Note that Winkler here uses the traditional term “nederduitsch” to refer to both Dutch and Low German dialects. He is convinced that Holland and western Utrecht were frisophone in the first millennium. Their dialect would subsequently have become Hollandish through the influence of Franconian from Brabant, Flanders and Guelders. The “mishmash” of Frisian and Franconian must “certainly” first have gained a foothold in southern South Holland, since Dordrecht is the oldest commercial town of Holland.

8. According to the preface of the edition, Winkler was inspired for his enterprise by F. J. Stalder, *Die Landessprachen der Schweiz oder schweizerische Dialektologie, mit kritischen Sprachbemerkungen beleuchtet. Nebst der Gleichenissrede von dem verlorenen Sohne in allen Schweizermundarten*. Aarau, 1819. But the earlier dialect enquiry by the French imperial *Bureau de Statistique*, held between 1806 and 1812 under Charles Etienne Coquebert de Montbret, had already relied on dialect translations of the parable of the Prodigal Son. This enquiry provides some of the very first Dutch and German dialect texts in the modern era, e.g. from Cologne, Krefeld, Cleves, Wesel, Venlo, Roermond, Weert and Maastricht, cf. Maes 2005 and Bakker & Kruijsen 2007.

9. “from a dialectological point of view, northern North Holland or West Friesland may be regarded as a continuation of the province of Friesland, the dialects of Kennemerland and Amstelland belong to South Holland, and those of Gooiland, as well as the closely related ones from the province of Utrecht, represent a transition from Hollandish (Friso-Franconian) to purely Franconian dialects” (Winkler 1874 II: 1; see already Winkler 1868: 9–13).

10. “a rather recent mishmash of Frisian and Low German, viz. of Westerlauwers Frisian and of Franconian Low German.”

Then, from Flanders and Brabant, which had already been Christianized for a longer period, “development and civilization” were introduced to the Frisians of Holland. Towns started to grow, and “strangers” from the southern provinces settled in them and greatly influenced their language: “zoodat weldra de stedelingen, de poorters geen friesch meer spraken, maar nederduitsch, even als in de steden van hun zuidelijke en oostelijke buren (...). De dorpelingen rondom de steden hebben echter hun oude friesche moedertaal zekerlijk nog langer gegesproken”<sup>11</sup> (p. 5), until, eventually, the villages too adopted the new speech of the Hollandish towns. Winkler is “pretty certain” that Frisian had died out south of the river IJ by the sixteenth century, whereas it may have survived somewhat longer in rural Waterland or remote parts of West Friesland.

Most of Winkler’s linguistic judgements are value judgements, such as that dialects can be “ugly”. But his familiarity with Frisian enabled him to make at least a few concrete linguistic observations. Of the dialect of Schagen, and, in general, that of West Friesland, he notes that it has “generally preserved intact the Frisian syntax and the Frisian pronunciation of consonants, and it also contains many purely Frisian words, or partly corrupted words which clearly betray their Frisian origin. But the vowels of this dialect are nearly all pronounced in the novel, Hollandish way” (p.33). By and large this view of the West Friesland dialect has been confirmed by later research.

## Boekenoogen and Te Winkel

Winkler’s collection had great influence on Dutch linguistics and dialectology in the first decades after its publication. One of the first scholars who tried to conduct a more profound study into this topic was Boekenoogen 1897. In the book’s introductory chapters “De Volkstaal in Noord-Holland” and “De Volkstaal in de Zaanstreek”, he discusses a large number of differences between North Hollandish and Standard Dutch. He concludes that “the peculiarities of North Hollandish cannot be explained from the Franconian dialect of Holland. We must seek the explanation elsewhere, viz. in the fact that the language which used to be spoken in North Holland was a dialect of Frisian” (Boekenoogen 1897: iv). By way of proof for this claim, he adduces, among other things, North Hollandish names which seem to show Frisian sound combinations (e.g., *Joermoit* beside *Evermoit*), Frisian-like reflexes of Germanic phonemes (e.g., *ie* instead of *ee* for Germanic \*ai, and *j-* for

<sup>11</sup>. “so that soon the city dwellers did not speak Frisian anymore but the same Low German as was found in the towns to their south and east (...). But the villagers around the Hollandish towns certainly kept speaking their Frisian mother tongue for a longer time”.

g-), and extra-linguistic information. An example of the latter is the claim, made in 1599 by a headmaster from Barsingerhorn, that the local population spoke “half Frisian, half English” (Boekenoogen 1897: i-lxxiii).

In his influential history of Dutch, Te Winkel (1901: 787) starts from the traditional division of the Low Countries into three tribes, the Frisians, the Saxons and the Franks. The Frisians would originally have occupied all of the modern provinces of Groningen, Fryslân, western Drente and Overijssel, northwestern Gelderland, Utrecht, North and South Holland, Zealand, and northwestern Flanders. Subsequent admixture between the three tribal dialects would have resulted in three “mixed languages” spoken at present in the western provinces. With this view, and with the dialect divisions he makes, Te Winkel stays rather close to Winkler’s proposals, but he gives a more detailed discussion. Te Winkel (on p. 787 and on the dialect map which accompanies the article) distinguishes (1) Hollandish, a “Frisian-Franconian mixed language”, spoken in modern South Holland and southwestern North Holland; it can be further subdivided into West and East Hollandish. (2) Hollandish-Frisian, which would have resulted from a more recent “mixture” of original Frisian with adstrate Hollandish. Te Winkel further subdivides this category into North Hollandish and “Beach- and Overmaashollandish”, the latter spoken in the conservative villages of the South Holland coast and around the mouth of the River Meuse. (3) Frisian-Franconian, defined as a mixture of Frisian with West Franconian, which was spoken in an area between Hollandish and the interior, comprising southeastern North Holland and the provinces of Utrecht, Zealand, West Flanders and French Flanders. Te Winkel (1901: 805–7) also lists a larger number of “Frisian” dialectisms in the modern standard language. Most of these we would now regard as “Hollandicisms”, and many will be discussed in the subsequent chapters. Te Winkel’s view survived until 1925, up to and including Verdam 1923: 46–51. The latter goes so far as to call the Hollandish coastal villages with conservative dialects “Beach Frisian” rather than “Beach Hollandish” like Winkler and Te Winkel did.

## Van Wijk and van Haeringen

Van Wijk coins the term *frisisme* ‘frisianism’ in 1911 (1911: 181, 186; his spelling *friesisme* of 1909 did not gain wider currency) in reference to Boekenoogen’s observations from 1897.<sup>12</sup> Van Wijk calls for a re-evaluation of Te Winkel’s terminology.

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<sup>12</sup> Van Wijk uses the term in the same way as I do here, viz. ‘a trace of the Frisian language as preserved in Hollandish or another language’. In the pejorative meaning ‘interference of Frisian when a native speaker of Frisian speaks or writes Dutch’, *frisisme* is first attested in Dutch in 1917 (based on the DBNL corpus).

He proposes to reserve “Frisian-Franconian” for the erstwhile Frisian area of North Holland and the Gooi (p. 180). As to the larger coastal area from Flanders to Holland which has a long fronted vowel *æ* as the counterpart of Dutch *aa* from PGm. \*ē, he argues that this must be regarded as an originally Franconian dialect, into which some Frisian “elements” have been adopted. He goes on to ask (p. 186): “The main question then becomes, whether such frisianisms are due to Frisian overlordship or to continued contact between Frisian and western Low Franconian. Such contact could already have started in the period when the Salian empire arose in southeastern regions [of the Netherlands]. Such a hypothesis would also explain the frisianisms in West Flanders.”

Among the first to answer van Wijk’s call for more detailed investigations is van Haeringen (1921, 1923a, 1923b, 1927). In 1923a, he argues that real or apparent frisianisms in western Dutch should be divided into two categories: 1. Isolated words which in their phonology show Frisian, non-Franconian developments, such as *ladder* ‘ladder’ and *baken* ‘beacon’. 2. Sets of words which all show the same Frisian sound changes, and look like they developed according to a general rule.

### Mansion, Kloeké and Heeroma

The term *Inguaeonic* as it has been used in historical linguistics seems to have entered Dutch scholarship from German, where we find it, among others, used by Siebs (1889: 6, as “ingaevonisch”; Siebs actually discourages using the term, and prefers “englisch-friesisch” for the common ancestor of Frisian and the insular Anglo-Saxon dialects) and by Franck (1910: 2). In Dutch, I first encounter *Ingwaeonisch* and *Ingwaeonisme* in Mansion 1924, who has a chapter on Invaeonisms in Old Dutch personal names and place-names (p. 114–7). It is also clear that the article by Wrede 1924 was intensively read by Dutch linguists. The terms *Ingwaeoons* and *Ingwaeonisme* – after 1951 also spelled without the *a* – soon become commonplace. Kloeké 1932 publishes an article on the loss of nasals before a fricative in Dutch. He talks about an opposition between Inguaeonic and Franconian and omits all mention of the Frisians. In fact, Kloeké (p. 338, also Kloeké 1950: 145) explicitly states that he wants to avoid the old tribal denominations, as they can lead to aprioristic thinking.

Heeroma joins in the discussion in 1934 and keeps developing his views on the matter until his death in 1972. Of all Dutch scholars, he has contributed by far the most articles to this question. In 1934, Heeroma dismisses views that regard the different coastal provinces as linguistically separate entities (in the way that Te Winkel did), and instead posits that they can be seen as a single unity. In support, he adduces shared features such as the *æ*-reflex of PGm. \*ē and the unrounding of

\*ü to i or e, which is found in the same words everywhere along the coast. Heeroma observes that such features do not match the developments in Frisian proper, and agrees with van Wijk that the original coastal dialect must have been Franconian. He terms it *Zeefrankies* ‘Sea Franconian’. In his 1935 PhD dissertation, Heeroma aims to increase our knowledge of the Hollandish dialects. He compares their medieval characteristics, as they emerge from non-literary sources, with the phonology of modern dialects of the local dialects of North and South Holland, such as those of Texel, Wieringen, Enkhuizen, Egmond aan Zee, Volendam, Assendelft, Katwijk, and Scheveningen. Heeroma (1935: 134) declares that he has “defrisianized” North Holland by arguing that most of the deviant phonological features of North Hollandish are merely relics of the erstwhile, original Hollandish dialect. These relics are much less numerous, according to Heeroma, in South Holland, because of subsequent waves of innovations from the south (Brabant) and the east (Utrecht), which affected South Holland more than North Holland. Heeroma 1939: 235 justifies his deviating view of matters: “From the start, the thought imposed itself on me that North Hollandish and the Groningen dialect must represent the original autochthonous ‘Dutch’, and that Frisian had to have been imported there.”

In 1943a, Heeroma already retracts his minority view that all of Dutch would be Franconian-based. According to this article, it was the Inguaeones who settled in the western and northern Low Countries. Heeroma invokes an alleged distinction between West and East Inguaeonic in order to explain the different character of Hollandish and Zealandish. The latter two dialects would go back to West Inguaeonic whereas Frisian would be based on East Inguaeonic. Krogh (1997: 24) ascribes this shifted viewpoint to the Second World War: “Vor dem Hintergrund des Zweiten Weltkrieges war die These von einem wenigstens teilweise nicht-fränkischen, sprich: nicht-deutschen, Niederländisch wohl attraktiver.” See also Hoekstra 1995 on the political background of Heeroma’s ideas on Frisian and Inguaeonic. Other relevant publications are Heeroma 1936 (on *uier* ‘udder’ and other “Inguaeonic” words), 1939 (on Inguaeonic in the larger context of West Germanic), 1942a, 1948, 1951a, 1965a, 1965b, 1968a, and 1968b, to mention only the most explicit papers.

Schönfeld 1946 accepts a Frisian substrate for North Holland but objects to views that Frisian had been spoken elsewhere, such as in South Holland or Flanders. In his historical grammar of Dutch, starting with the third edition of 1932, Schönfeld has collected evidence for inguaeonisms in Dutch (last version: Schönfeld & van Loey 1970: xxxiii–xxvii). Schönfeld’s approach was influential because of the popularity of his handbook.

## Back to Frisian: Gysseling, Blok, Miedema

The question of what to call the non-Franconian elements and developments in western Dutch has remained at the forefront of the discussion until the present day (Krogh 1997). Opinions have swung like a pendulum back and forth between ‘Inguaeonic’ and ‘Frisian’. The term ‘North Sea Germanic’, which has been popular in German and English scholarship, has been less successful in Dutch, maybe because ‘Inguaeonic’ had already established itself (Miedema 1970: 2).

The detailed case studies, often based on Old Dutch evidence, by the historian Blok (1958, 1959ab, 1963, 1965, 1969, 1971, 1991) and the philologist Gysseling (1960b, 1962) restore the Frisians as the possible donors of important features of the western dialects. Gysseling (1962: 22) states: “Nothing holds us from calling all of the early medieval Frisian empire, which also comprised Zealand (...), Holland, Utrecht, the Veluwe and Drente, frisophone. But its Frisian will have differed only little from the neighbouring dialects.” The contributions by the frisianist Miedema (1970, 1971, 1977, 1987, 1988) go in the same direction. Miedema 1971 calls the coastal dialects from before the franconization “Early Old Frisian”.

## Taeldeman on Flanders

For Flanders, Taeldeman 1982 offers a maximalist enumeration of possible Flemish ingvaeonisms. He assumes that (West) Flanders was part of the original Inguaeonic territory:

Zunächst dürfen wir annehmen, dass Flandern, jedenfalls der westliche Teil, anfangs ausschliesslich oder vorwiegend von Nordseegermanen germanisiert worden ist. (...) Diese Besiedelung Flanderns geschah m.E. teilweise direkt, d.h. dass ein Teil der “Sachsen” im 5. Jahrhundert über das Meer oder über das Land nach Flandern gekommen ist und sich da dauernd niedergelassen hat. Aus dieser germanischen Frühzeit datieren alle diese flämischen “Ingwänismen”, die man auch in allen anderen nordseegermanischen Sprachen/Dialekten findet und die überall eine weite (sogar allgemeine) Verbreitung gekannt haben. In den südlichen Niederlanden reichen sie bis nach Brabant und manchmal sogar bis nach Limburg.

From this initial Inguaeonic stage, Taeldeman distinguishes a second, later period. This would have involved the spread of Frisian from the north into western Flanders, which, according to the now obsolete theory of periodical transgressions of the North Sea, would have been largely uninhabited between the fourth and the seventh century. Taeldeman:

Nach Süden erstreckte sich das friesische Gebiet im 9. Jahrhundert ohne Zweifel bis zur heutigen belgisch/niederländischen Staatsgrenze. Dass Flandern selbst je friesisches Gebiet war, bezweifle ich aber sehr. Auf jeden Fall hat diese Gebietserweiterung auch die Verbreitung vieler Friesismen ins niederländische und flämische Küstengebiet bewirkt, obwohl ich mich hier nicht geneigt fühle zu behaupten, dass das Altflämische ein ausgeprägtes friesisches Substrat hatte.

The most important reason for the latter caveat is the absence of many of the Flemish *ingvaeonisms* in Frisian itself.

Another source for the Ingvaemonic character of Flemish is, in Taeldeman's eyes, the continued contact with England. He claims that Flanders adopted a rather large number of features from English in the period between 1000 and 1500, such as the apocope of final schwa, verbal *do*-support, and others. This line of thought was not new, as it was preceded, among others, by Weijnen 1965a. It has never become popular, however, probably because compelling linguistic arguments are missing. To my mind, none of the features allegedly deriving from contact with English must necessarily have arisen in Flemish through contact (with English or with another overseas variety of Germanic). Krogh (1997: 28) argues that the nominative and accusative plural masculine ending *-s*, which is most frequent in Flemish, may have arisen in the Franconian dialect of early medieval Flanders under the influence of the neighbouring Old Saxon and Anglo-Saxon dialects. But the borrowing of such a basic morphological feature, in isolation from the rest of the morphological system for which such borrowing does not have to be assumed, is hardly likely. A better, language-internal explanation has been provided by Marynissen (1995: 203–24), who has rendered all previous accounts of the spread of *s*-plurals in Dutch obsolete. Of course, allowance must be made for the occasional English loanword brought to coastal towns by fishermen and traders (see, e.g., Meertens 1942: 161 on the Katwijk dialect).

### **van Bree and Bremmer**

The terms Ingvaemonic and *ingvaeonism* are also explicitly preferred to Frisian and frisianism by van Bree (1997a, in particular p. 24–6). In his short monograph, he tries to answer two questions: (1) How did the Ingvaemonic variety of West Germanic arise? (2) How were the western Low Countries de-*ingvaeonized*? In order to come closer to the answer than his predecessors, he invokes the help of van Coetsem's views on language contact processes. This results in by far the most detailed, most inclusive and most nuanced discussion of the Ingvaemonic question of its day. For instance, van Bree also includes syntactic questions in his discussion. Van Bree has since continued to work on Frisian substrate effects in Drente and in Low Saxony

(van Bree 2000, 2003), in North Holland (van Bree 2012), and, a related topic, on the origins of Town Frisian (van Bree 1994, 1997b, 2001, van Bree & Versloot 2008).

Bremmer (1997a, 2008) returns to the view that the coastal zone of Holland was frisophone before it became Franconian after 1100: “Such [linguistic] features allow us to assume that in the inhabitable parts of Holland between the coast, the Meuse and the IJssel, an early form of Frisian was spoken, with a concentration on either side of the mouth of the Old Rhine. This Frisian speaking area was gradually rolled back to the north” (Bremmer 2008: 295).

In his article, Bremmer tries to determine whether the coastal dialects of Holland, Zealand, and Flanders were Frisian or Ingvaemonic before they shifted to Franconian. He draws up a relative chronology of sound changes which the coastal dialects shared with Frisian, but which are absent from inland Franconian speech. The earlier changes he calls Ingvaemonic, the more recent ones (those typical of West Frisian), Frisian. Since some typically Frisian changes (WGm. \*e and \*i > iu, WGm. \*þ- > t-) are occasionally found in names in the Old Rhine area, but hardly ever further south, Bremmer (p. 293) concludes that Holland was the southernmost frisophone area. Zealand and Flanders, in his view, did not get past the Ingvaemonic stage. Bremmer (1997a: 72, 2008: 293, 2009: 22) introduces the term “Proto-Frisian” in a linguistic context,<sup>13</sup> to refer to the changes leading up from (in his terms) Ingvaemonic or North Sea Germanic to attested Old Frisian proper.

## Goossens and Buccini

Another landmark for the present era of research is set by Goossens 1981. He identifies an important structural difference between western and eastern dialects of Modern Dutch, viz. the presence versus the absence of secondary *i*-mutation. In this conception, Flanders, Zealand, Holland, as well as northwestern Brabant and western Utrecht belong to the western dialects. Goossens’ theory provides a new basis for the reconstruction of the Dutch (dialectal and standard) vowel systems, and also allows for a redefinition of what had previously been called the Ingvaemonic or North Sea Germanic dialects of Dutch.<sup>14</sup>

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13. The term “Proto-Fries” had already been coined by the historian Boeles in 1951, in the context of archaeological cultures in Frisia. In German, I find “Proto-Friesisch” used in the linguistic sense by Klein 1990: 199, who takes it from earlier publications by J. J. van Weringh.

14. Goossens (2008: 83) still speaks of “Ingvaemonic” dialects as opposed to Franconian ones, though “with a certain reluctance, because I do not wish to suggest any contrast between “tribes”, but would merely like to refer to groups of speakers, the WGerm. dialects of which clearly differed among each other.”

This opportunity is seized by Buccini (1989, 1992, 1995, 2003, 2010). In an explicit combination of language contact theory, as developed by van Coetsem (1988), with the structural opposition between coastal and inland Dutch, as posited by Goossens (1981), Buccini argues that a language shift from Ingvaeanic to Franconian can account for the absence of secondary *i*-mutation in coastal Dutch. Here is a summary of his views in his own words:

the Dutch failure of secondary umlaut is the result of language contact between Ingvaeanic speakers of the coastal areas and Frankish speakers of the interior – a contact in which the Ingvaeanic speakers acquired Frankish but in so doing disrupted the development of (secondary) *i*-umlaut. This contact occurred in the seventh and eighth centuries, when the process of *i*-umlaut had already run its course in Ingvaeanic but had only entered the first, limited stage of primary umlaut in Frankish. In the process of acquiring Frankish, Ingvaeanic speakers surely imposed various features from the stable domains of their language onto Frankish, including reduced nonprominent vowels, but likely failed to acquire non-salient, subphonemic phonetic processes of the target language. In other words, they acquired Frankish without any incipient secondary *i*-umlaut process, and also without *i*-umlaut conditioning factors in most positions. As a result, there arose a structurally independent Dutch language – a form of Frankish but one with markedly individual phonological and morphological characteristics.

(Buccini 2010: 306)

This theory is more explicit than some of the earlier proposals, which makes it easier to falsify its claims. Note that, in Buccini's view, which he makes explicit especially in his 2010 article, the Ingvaeanic substrate underlies all of coastal Dutch, from North Holland to West Flanders.

### **van Loon: No substrate**

In his recently updated and extended historical phonology of Dutch, van Loon (2014: 90–105, 159–73) also discusses the main phenomena of the coastal/inland Dutch divide. Van Loon rejects Buccini's explanation of the absence of *i*-mutation in coastal Dutch (p. 165) and explains all features which have been ascribed to a Frisian or Ingvaeanic substrate by means of language-internal developments of the local dialects, which, to be sure, share the oldest layer of Ingvaeanic developments, such as the loss of nasals before fricatives with subsequent compensatory lengthening of the vowel and the unrounding found in *pit*, *stik*. There would have been no linguistic break between the settling of the coastal area by the West Germanic speakers of an Ingvaeanic dialect and the modern varieties. This view basically coincides with that of Heeroma and Schönfeld. Van Loon explicitly connects his explanation with the

famous *litus Saxonum* of the fifth-century Notitia Dignitatum. He (p. 103) usefully cautions that the presence of Frisian names in South Holland of the tenth century points to the cohabitation of Frisians and Franks in that area; in other words, the names do not necessarily imply that the area was monolingually Frisian.

Van Loon also offers a novel interpretation of the western lack of *i*-mutation. He suspects that unstressed *-i* which caused *i*-mutation was reduced to schwa in western Dutch a few centuries earlier than in inland Dutch (p. 164), and that this is why there is no *i*-mutation of long vowels or of the diphthongs \**ai* and \**iu* in western Dutch. Subsequently, analogy would have removed *i*-mutation from most of its short-vowel targets. Van Loon also explicitly takes issue with Buccini’s explanation, although he offers no principled arguments against a substrate scenario. In a way, van Loon’s tentative solution combines “de oude dualiteit (...) tussen het Ingweoons en het Centraal-Nederlands”<sup>15</sup> (p. 91) with an internally motivated, phonological difference in the application of *i*-mutation. Thus, his explanation is similar to Buccini’s in phonological and geographic terms, but, according to van Loon, the differences between coastal and inland Dutch had internal rather than external causes.

### Schrijver: Latin substrate

A different direction of research is taken by Schrijver (1999, 2002, 2008, 2014), who stresses the possible contribution of Celtic and Romance dialects to the rise of the Dutch linguistic landscape. Schrijver introduces the term “coastal Dutch” in English,<sup>16</sup> but in a different way than I use it here. Schrijver (1999: 6) defines coastal Dutch as

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15. “the old duality (...) between Ingvaeanic and Central Dutch”.

16. The prefix *kust-* ‘coastal’ has slowly gained some currency in Dutch publications. In 1926a, Kloek comments on the use of “ingwāonisch” in a 1919 article by Frings, and equates the meaning of *ingvaeoontsch* with *litoraal* “littoral” (p. 7). In subsequent decades, one finds the sporadic usage of the term *litoraal* in the context of Ingvaeanic in the writings of Kloek and Heeroma. Gysseling 1943 discusses “Kustwestvlaams”. Gysseling 1966b: 208–12 introduces “Kustmiddelnederlands” and “Kustnederlands”, of which the former is adopted by Willemens 1997: 181 and the latter by Heeroma 1973 and Ryckeboer 1997, among others. Subconsciously, the term coastal Dutch may also have been made acceptable by the use of *kust* in Schönfeld & van Loey’s discussion of Ingvaeanic (from the seventh edition in 1959). They address the opposition between the coast and the interior, claim that “De oude onderlaag, die langs de kust woonde, (...) werd min of meer verfrankischt” [“The old substratum, living along the coast, (...) was more or less franconized”] (p. xxxii), and say that *delf* ‘canal, ditch’ is a coastal word, and can therefore be called Ingvaeanic (p. xxxiii). The term “Kusthollands” (Weijnen 1976: 176) is a counterpart of Gysseling’s “Kustwestvlaams”, and may also have been influenced by the term “Strandhollandsch” (‘Beach Hollandish’) in Winkler (1874 II: 74) and Te Winkel (1901).

the early medieval Germanic dialect or dialects, closely related to the other North Sea Germanic dialects, Old English and Old Frisian, that were spoken along the Dutch and Flemish coast and in which originated the Ingvaenisms that are found in Middle Dutch Franconian texts.

The main hypothesis in Schrijver 1999 is that a number of coastal Dutch developments, such as the fronting of \*ū and \*u, may be due to a British Celtic substrate on the Continent. Between the fifth and the ninth centuries, the speakers of Celtic along the Dutch and Flemish coast would have shifted to West Germanic, while introducing a number of phonetic features that we find reflected in the British Celtic languages.

In 2002, Schrijver (p. 102–9) revokes his hypothesis of a direct transfer from British Celtic to Germanic, and replaces it with a two-step scenario. Initially, in Roman Imperial times, the Celtic spoken in the Low Countries as well as in Lowland Britain was replaced by Latin. This Latin showed a number of substrate features which derived from Celtic. Subsequently, northwestern Romance, as it had developed from Latin, was replaced by the West Germanic dialects of the new settlers. In the Low Countries, this gave rise to coastal Dutch and Frisian. In this way, the Celtic features managed to enter coastal Dutch, Frisian and English, but indirectly, through a Romance intermediary.

In 2008, Schrijver introduces a novel, three-way distinction between coastal Dutch, Western Dutch and Eastern Dutch. Whereas his Eastern Dutch coincides with what I term inland Dutch, the coastal area is now subdivided into a littoral area, which Schrijver equates with traditional Ingvaenonic or North Sea Germanic, and a western area which is “wedged in” between the coastal and the inland dialects. Western Dutch is mainly defined by Schrijver as the basis of the modern standard language.

Schrijver 2014 devotes an entire chapter to the origins of Dutch (p. 122–57). Western Dutch is now defined as the area comprising Flanders, Zealand, Holland, plus the extreme west of Brabant and Utrecht (p. 126). It is thus similar to what I call coastal Dutch. Schrijver applies “coastal Dutch” to a subset of Western Dutch (p. 127): “The Western Dutch area contains the debris of a lost variety (...). This variety was more akin to Frisian and English than to Eastern Dutch.” In fact, coastal Dutch “is an early form of Frisian” (p. 130). Schrijver usefully points out that the term “Frisian” does not mean the same to linguists as to historians: “For a historian, Frisians are persons who lived in Frisia and took part in aspects of its culture to such an extent that this shaped a common identity. To linguists, Frisians are people who spoke Frisian. The two do not always match.”

Schrijver identifies coastal Dutch by surviving words and names in Western Dutch. Among the examples, he cites *i*-mutation of \*ū and \*u followed by unrounding,

the raising of \**æ* to *ie*, and others. Most of these examples will be discussed in the present study, and I will not anticipate my conclusions here. Schrijver sees coastal Dutch gradually being replaced by Western Dutch, first in Flanders, then in Holland, then in Zealand,<sup>17</sup> and finally in the north of North Holland.

The distinction which Schrijver makes between coastal and Western Dutch seems artificial. One of his main witnesses for coastal Dutch, viz. the unrounding yielding *pit* and *brigge*, is found (in traces) in all of Flanders, Zealand and Holland, and would therefore geographically qualify for Schrijver’s Western Dutch. As the main feature of Western Dutch, Schrijver (p. 131–5) regards the absence of *i*-mutation on \**a*, \**u*, \**ü*, \**ö* and \**au*, and the effects of spontaneous fronting on these low and back vowels. Again, I have to refer to the discussion in the chapters below for detailed comments, but several facts go against the proposed geographic concept. For instance, there is no evidence for an old, spontaneous fronting of \**a* to *e*, and the fronting of \**ö* and \**au* includes (South) Brabant, and may actually have started in that area.<sup>18</sup>

Schrijver (p. 140–1) does not altogether reject Buccini’s theory about a language contact origin for the lack of secondary *i*-mutation in western Dutch, but argues that the substratum responsible for these developments may rather have been of the Romance kind. In his view, the different vowel systems of Old Picardian, Old West Walloon and Old East Walloon (as reconstructed for the tenth century) closely correspond to the vowel systems that are reconstructed for Eastern Dutch, Central Dutch and Western Dutch, respectively. Some of the corresponding features would be (from east to west):

- no fronting in East Walloon and Eastern Dutch;
- fronting only of \**ü* in West Walloon and eastern Central Dutch;
- fronting of \**ü*, \**u*, \**uo* in Picardian and Central Dutch;
- fronting of \**ü*, \**u*, \**uo* in Picardian and Flemish, with the caveat that Flemish \**uo* has a different origin than Central Dutch \**uo*.

<sup>17</sup>. He does not say why Zealand would have held on to coastal Dutch longer than Holland. Maybe this is based on the suggestion, already made by Winkler in 1874, that the replacement by Franconian first took hold in the larger towns, of which medieval Zealand had only few (Middelburg and, to some extent, Zierikzee). It is a fact, in any case, that modern Zealandish generally retains more non-standard dialect features than modern South Hollandish.

<sup>18</sup>. Schrijver (p. 136) introduces a fourth geographic variety, viz. “Central Dutch”, which he identifies with “a wide band in the centre of the Netherlands and Belgium”. The area is defined more precisely on p. 148 as “Belgian Brabant, Antwerp, and Dutch central and western Brabant as well as western Gelderland.” It is characterized by the presence of secondary *i*-mutation (an eastern feature) as well as “spontaneous fronting to varying degrees” (a western feature).

From the fact that Germanic rather than Romance must have been the language of the socio-political elite of the southern Low Countries in the early Middle Ages, Schrijver (p. 151) infers that the spontaneous fronting in Dutch is an Old French substratum feature. The isoglosses seen in southern Dutch would reflect the same isoglosses which were already present in the Romance substratum.

But many isoglosses may have changed their course over the centuries. For instance, the fronting of \*au to \*ō to \*uo to \*yø in East Flanders is regarded by Schrijver as the result of old, spontaneous fronting (p. 146). But Dutch dialectologists have established that the fronting applied earlier in Southwest Brabant and thence spread to the towns of East Flanders. It had not yet reached Ghent in the sixteenth century (Taeldeman 1985: 200–1, Goossens 1992b).<sup>19</sup>

The vowel systems of the four Romance and Dutch contact zones “in the first millennium (prior to secondary *i*-umlaut)” are compared on p. 147–9, but the Dutch facts are presented in such a way as to maximize the similarity with Romance. For instance, Tables 2 and 3 claim that Central Dutch occasionally had a fronted reflex \*y of short \*u, which would increase the parallelism with the vowel systems of West Walloon and Picardian. Yet I know of no evidence that we must assume such fronting for the first millennium. In the Middle and Modern Dutch period, the position before *r* (often before *rC*) is conducive to fronting, but that is clearly conditioned by the phonetic features of *r* and does not have to go back to Old Dutch (cf. van Loon 2014: 229). Table 2 also posits ſ̄ as the reflex of \*ū in eastern Central Dutch, which is probably untrue for the first millennium. See § 16 for the traces of a back vowel in Brabant.<sup>20</sup>

Table 3 assumes a general, spontaneous fronting of WGm. \*ō via \*uo to \*yø in Central Dutch, although fronting is attested only rarely in the medieval and modern record. Two objections spring to mind. Firstly, such an early, general fronting of \*uo is contradicted by the fact that all of Brabant originally possessed the

19. It has been observed (Grootaers 1942: 221, Weijnen 1964: 12–3, van Bree 1996: 270) that the modern isogloss of *h > zero* in southern Dutch is continued on the French side of the language border in the same direction, and some scholars have tentatively ascribed this coincidence to a common substratum. Yet the isoglosses must have run differently in the Middle Ages, both on the Dutch side (where *h > Ø* spread east from Flanders) and on the French side, where Ø- may have spread from the Isle de France northward into Picardy and Hainaut (Bourciez 1971: 125). Thus, the present coincidence of the isoglosses on both sides of the linguistic border is not necessarily ancient.

20. This objection does not have to be detrimental to Schrijver’s hypothesis, since in Walloon, too, there are indications that the isogloss between western ſ̄ and eastern ū has shifted eastwards in the course of the later Middle Ages. Whereas nowadays only the province of Liège retains \*ū as a back vowel, the results of \*ūn show that, until at least 1200, Namur had also retained the back vowel (Remacle 1948, chapter I, § 26).

reflex of *i*-mutation where it was not morphologically functional,<sup>21</sup> such as in the counterparts of StDu. *groen* ‘green’ < \*grōni-, *droog* ‘dry’ < \*draugi- and *schaar* ‘scissors’ < \*skēri-. If \*uo had already been fronted to \*yø before *i*-mutation took place (as per Schrijver’s chronology), the modern reflexes of words with and without *i*-mutation of \*ō should be the same, but they are not. Secondly, South Brabant had unrounding of front rounded vowels at least since the fourteenth century, and maybe earlier. The unrounding must post-date secondary *i*-mutation. In Brussels and Antwerp, unrounding was apparently abandoned for sociolinguistic reasons, and from these two cities, the front rounded vowels were (re)introduced into the surrounding countryside, leaving only a few relic forms with unrounding outside the productive unrounding areas of Leuven, Boom and Aalst in the twentieth century (Goossens 1963, 1992b, 2014).

It seems likely that the unrounding of \*ū, \*ō, \*öü as found in South Brabant acted as a pull factor for the palatalization of old \*ū and of \*au, which started in southwestern Brabant and thence spread to East Flanders, see above. Just such a case of unrounding as a pull factor for vowel fronting is attested in Belgian Limburg, which also has a fairly large area with general unrounding of front rounded vowels (it may in fact have formed one single area together with South and Central Brabant, see Goossens 2014). Here, we have recent, twentieth-century evidence that suggests that unrounding fed the subsequent and more occasional fronting of old back vowels, for which there was now room (Goossens 1992b: 30 on Hasselt, Goossens 2013: 39–44 on Belgian Limburg in general). Of course, other factors may have been involved in the changes among the long vowels, especially the rise of new long vowels from open syllable lengthening of short vowels around 1200.

## Dutch and Romance

Schrijver’s theory has the merit of pointing out that continued language contact between Romance and Germanic in the Low Countries deserves more attention than it has hitherto received. It is not that the topic has been completely out of people’s minds, but most studies have looked at individual features in isolation without much general discussion. Also, most investigations present the Romance speech area (in this case, northern French) without much discussion of its variation and changes in time, that is, taking into account the possibility of shifting isoglosses. The contact between Dutch and French has been investigated by, among others,

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21. Even where it was later removed by paradigmatic analogy, secondary *i*-mutation originally must have reached westwards to Antwerp and the Dender river, compare the map *loopt* ‘walks’ in *FAND II/III* for \*au and the discussion in Belemans & Goossens 2000: 177–8 for \*ō.

Salverda de Grave (1901, 1906, on the French loanwords in Middle and Modern Dutch), van Ginneken 1934 (a general claim), Grootaers 1942 (on the loss of initial *h-*), Weijnen 1964 (a maximalist collection of possible influences), Weijnen 1967 (on Romance lexicon in Dutch), van Hoecke 1978, 1979, 1980, 1988 (on the diphthongization of short *e* in Dutch and northern French), de Rooij 1965, 1991 (on syntactic features), Ryckeboer 1991 (on unconditioned fronting) and 1997 (various topics), Kruisjen 1995 (concentrated on a small region but very detailed), de Schutter 1992 and 1999 (summarizing), and Besse (2003). Frings & Müller 1966–68 is also very relevant for the Dutch linguistic area. In short, Dutch and French contact still appears to be an open topic for the future, and one that may well turn out to have its repercussions on our views of coastal versus inland Dutch. Such investigations will also have to take into account the toponymical evidence. It is notoriously hard to interpret, but it does show that there were both remnants of an old Romance population who managed to survive for some period in the germanophone area and later migrations from Wallonia into the Old Dutch area (Tummers 1962, van Durme 1996, 2002, Haubrichs & Pfister 2014). Inspiration may be sought in the better-studied history of Moselle Romance, a Romance speech area which became isolated from Gallo-Romance but survived until at least the tenth century. The gradual replacement of Romance by Franconian along the Lower Moselle was described in the following three stages by Wolfgang Kleiber (as cited by Post 2004): (1) Franconian-Romance bilingualism with Franconian being the dominant language, (2) Romance was reduced to agrarian vocabulary, mainly winemaking, and tended to become a domestic language only, (3) Romance was reduced to ever smaller communities which became individual linguistic islands before dying out. This may have applied in a similar way in the Dutch-Romance contact zone in northern Gaul, but it is also reminiscent of the possible scenario for the replacement of Frisian by Hollandish in North Holland after 1200.

## CHAPTER 6

# The western Low Countries in the Early and High Middle Ages

Language history implies social history. It is therefore important to study the geographic and socio-economic situation between 500 and 1200, with a view to determining possible sociolinguistic scenarios for language replacement in the western Low Countries.

### 6.1 Physical geography in the Early Middle Ages

Few European landscapes have changed their aspect so drastically over the last two thousand years as the Low Countries. Each minor change in the climate had the potential to cause major changes to the natural landscape and to the ways in which people could make use of the landscape. Reconstructions of the Dutch landscape before 1000 CE show enormous differences in land use compared to the present-day situation. At the beginning of the Common Era (Vos et al. 2011: 63), instead of the open connection of the Zuiderzee or IJsselmeer with the Waddenzee that we find in the modern period, the northern Low Countries harboured a central lake, Lake Flevo. This body of sweet water was connected with the North Sea by tidal gullies through the salt marshes of the Wadden ('Mud flats'). The waterway between Lake Flevo and the North Sea widened in the Carolingian period, when Medemblik became an important town for the purpose of trade and military strategy. Lake Flevo now received the name *Aelmere*. In the same period, marine influence on the southern coast of Lake Flevo increased, and the IJssel river attained its status as a major route for international traffic. After 1200, the Almere had become an actual sea, the Zuiderzee.

Map 2 reproduces the paleogeographic map in Dijkstra 2011: 14, showing the situation not too long before the first reclamations were started. Of modern Holland and Zealand, up to 90% was covered with peat bogs rising a few meters above sea level (peat bogs similarly dominated southern and eastern Fryslân, and large tracts of the eastern and southern Low Countries). The bogs themselves must have been unfit for permanent human occupation, but people probably visited them on a regular basis and exploited their limited possibilities. It is likely that the bogs were used

for transhumance, serving as summer pastures for livestock (de Bont 2014: 72). The bogs may also have been used – and there is evidence that this started in the Roman period – for extracting peat and salt (de Cock 1969). They were intersected by smaller and larger natural drainage streams which provided easy access for small boats (de Bont 2012: 40). In North Holland, an archaeological find dated to ca. 800 CE that was found in a former bog area may belong to an erstwhile settlement along a small bog stream, the *Bamestra* (de Koning 2012: 18). In Zealand, there are traces of habitation in the peat area from the Roman period (Kuipers & Swiers 2005: 24).

The so-called older dunes stretched along the coast and provided a sandy underground which was suitable for habitation and agriculture. This strip was around 5–10 kilometres wide, but in the course of the Middle Ages, its west side was covered by the sand of the younger dunes, which could develop to a height of several dozen meters. Zealand and western West Flanders largely consisted of salt marshes, which had developed from the earlier intertidal mud flats and sand flats which were inundated daily by the sea. After 500 CE, the tidal creeks filled up and the salt marsh landscape developed (Deckers 2013: 13).

The variable influence of the sea on the growth and erosion of the land was explained by scholars in the second half of the twentieth century by means of the transgression model, which assumed different periods of transgression (also called the “Dunkirk transgression periods”) and regression (“Carolingian regression”) of the North Sea. It was assumed that the sea level had risen and sunk to various degrees at different intervals. This explanation has now been given up due to a lack of conclusive geological evidence and because the relevant geophysical facts, such as medieval inundations, can be explained differently (Berendsen & Stouthamer 2001, de Boer 2005, Baeteman 2009, Deckers 2013: 13). Also, the early medieval hiatus in traces of human occupation along the coast which used to be invoked in support of a period of North Sea transgression, has partly been filled by new archaeological finds. The differences in the interaction between the sea and the coast at different places and moments in time are now regarded as the result of the joint influence of a few geophysical factors: (1) the continually decreasing speed of the rise in sea level in the course of the Holocene, (2) the morphology of the underlying, non-marine sediments, (3) the changing sediment balance in the tidal basin (de Boer 2005: 50). This revised view of the early medieval landscape history also implies that the coastal plains were probably suited for permanent settlement much earlier than had previously been assumed by archaeologists, possibly already in the sixth century (Ervynck et al. 1999). Recently, archaeological evidence has indeed been found for settlements from ca. 650 in Flanders and Zealand (Deckers 2013: 13).



Map 2. Paleogeographic map with a reconstruction of the western Netherlands ca. 750 CE (taken from Dijkstra 2011: 14, Figure 1.2; translated by Dijkstra)

## 6.2 Settlement in the Early Middle Ages

Due to the natural landscape of the Low Countries, the settlement history has in the twentieth century often been described in terms of a contrast between inhabited and uninhabited areas. This terminology may convey the impression that different population groups were living in isolation from one another, which would have certain consequences for our assessment of the linguistic situation. More recently, archaeologists have shifted their discourse to an opposition between (cultural or economic) centres versus their periphery (Theuws 1990). This allows for (more) continuity of habitation, also in areas without a dense population, and hence calls for a reconsideration of the possible linguistic scenarios. The surge in archaeological excavations since the 1990s, together with the improved methods of historical geography, has resulted in a different and more fine-grained picture of the medieval history of many areas. The transition from the Roman period to the Merovingian one, and from the Early to the Late Middle Ages, is now better understood and is viewed as a more gradual process than it was before.

In North Holland, archaeologists previously assumed a habitation hiatus between the fourth and the seventh century (thus still Besteman 1990), but it now appears that, if the area was depleted of people at all, this situation cannot have lasted for more than a few generations between 350 and 450 (de Koning 2012: 19). Some prehistoric hydronyms surviving in North Holland may even be interpreted as a sign of population continuity between Antiquity and the Middle Ages. Habitation may have been most persistent in Kennemerland (on the older dunes) and on Texel and Wieringen. Since the younger dunes covered part of the older dunes under a thick layer of sand in the Middle Ages, whereas some other parts of the older dunes were washed away by the sea, it seems likely that many archaeological traces of earlier habitation are still hidden under the sand whereas others were lost to the waves (Besteman 1990: 93). The finds of ‘Frankish’ pottery in fifth-century strata show that North Holland was in contact with, among others, the middle Rhine and Mosel areas. Also in the fifth century, ‘Anglo-Saxon’ fibulae are absent from finds in North Holland, whereas they do appear in Frisia east of the Vlie. De Koning (2012: 26) infers that North Holland may have had a “restbevolking”<sup>22</sup> and that it did not attract migrants because of its position away from the main traffic routes to Britain, viz. the Rhine in South Holland and the Vlie in Frisia. From the seventh century on, the number of settlements increases, maybe (but not necessarily) due to recolonization from Frisian territory elsewhere. Many explanations exist for the survival of the name of the Frisians from Antiquity (Latin *Frisii*, Gr. *Phrissioi*) into

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<sup>22</sup>. “remnant population”.

the Merovingian (*Fresones*, Greek *Phrissones*) and Carolingian (*Fresones*, *Fresiones*) periods. This survival did involve some formal modifications, in particular, we find *n*-stem inflection in the medieval variants and variation between *i*- and *e*-vocalism in the first syllable which was absent in Antiquity. I am sympathetic to the idea that the ancient Frisians had disappeared, whereas their name had survived in Romance speech. It was then borrowed back into the Germanic dialects (Rübekeil 2014: 66), reaching the Frisians themselves via the intermediary of the Merovingian Franks (Bazelmans 2009: 331). This could explain the emergence of Old Franconian and Old Frisian /e:/ from what, in Latin and Greek, may have been short /i/.

Dijkstra 2011 provides a recent survey of the archaeological situation in South Holland, more specifically, along the estuaries of the Rhine and the Meuse. He assumes a steep drop in habitation in the Late Roman period (after 260) without a complete depopulation. People may have continued to live there, especially along the rivers and on the older dunes (*strandwallen*). After 450, traces of human activity slowly increase again. Arguments from toponymy and archaeology suggest that, after 500, settlers spread from the Rhine estuary to reclaim the sandy soils west of the bogs, both between the Meuse and the Rhine (South Holland) and north of the Rhine (Dijkstra 2011: 93). There are also toponymical and archaeological indications for deforestation of the woods on the old dunes south and north of Haarlem in the Carolingian period. The resulting settlements were probably given up in subsequent centuries because of the sand-drifts that created the younger dunes (Dijkstra 2011: 88).

Whereas the Rhine estuary was important for trade and settlement from the Roman period on, the Meuse-Merwede estuary may have had narrower river banks which were less favourable for settlement purposes. The region does not play a significant political role until the late Carolingian period. Dijkstra (2011: 89) thinks that the Meuse estuary may have seen “een sterk aandeel van 9<sup>e</sup>-10<sup>e</sup>-eeuwse kolonisten uit het Midden-Nederlandse rivierengebied en/of de Brabantse regio”<sup>23</sup> since, in the Late Middle Ages, we find jurisdiction delivered locally by sheriffs, as in Zealand and Brabant, rather than by *asega*'s as in Frisia (Blok 1963; see below on *asega*). If this reasoning is correct, the assumed colonization from the east and southeast may have had a significant effect on the linguistic situation in the region.

For Zealand and coastal Flanders, we must distinguish between the coastal plain, which became permanently inhabitable around the Merovingian period, and so-called “Sandy Flanders”, the inland area between the coastal plain in the west and the river Scheldt in the southeast. For the coastal plains, Loveluck & Tys (2006: 156) conclude that there may have existed “a settlement hierarchy of Flachsiedlungen

<sup>23</sup>. “a large proportion of 9th-10th-century colonists from the Middle Dutch river area and/or Brabant”.

farmsteads on the contemporary ground surfaces of silted-up tidal channel ridges, focussed on nucleated settlements of multiple households, located on terp mounds such as Leffinge and Bredene". About the sandy inland area, Vermeulen 2001 argues that "small groups of Germanic farmers" had been able to settle there in Late Antiquity, and that its occupation shows continuity throughout the Merovingian period, even if only in the shape of small settlements. From the seventh century onwards, archaeologists discern "larger rural entities, probably focused around major *villae*", as well as the development of non-rural settlements along the rivers Scheldt and Lys. The most important town was Ghent, whereas Antwerp must have had some regional importance already in the sixth to eighth centuries, but was still a "a semi-rural dispersed type of settlement" (Devos et al. 2013: 169).

### 6.3 The high medieval reclamations

Very roughly, land reclamations in the western Low Countries could take three different forms: (1) deforestation of woodlands, (2) enclosure of salt marshes and river banks that had been raised above the water level by natural processes, (3) drainage and parceling of peat bogs. The first is the oldest method. In the western Low Countries, it only applied to the wooded parts of the older dunes in Holland and to some inland parts of Flanders. Place-names such as *Voorhout* are a reminder of this period, as is the name *Holland* 'Woodland' itself (see below on this name). Method (2) may already have been practiced in Roman times (as shown by the finds of culverts from the Roman period), but it is especially well attested for medieval Zealand and West Flanders. Method (3) was applied on a large scale in Holland, Utrecht, and parts of northwestern Brabant, Zealand and Flanders throughout the Middle Ages. Subsequently, through soil compaction and erosion by wind and water, large tracts of reclaimed land became permanent lakes in the later Middle Ages. Between 1500 and 1940, many of these lakes were drained mechanically in order to convert them to agricultural land.

The peat reclamations consisted of "het systematisch ontwateren in de vorm van lange opstrekende percelen en het beheersbaar maken van het waterpeil, zodat de grond ook voor akkerbouw gebruikt kan worden"<sup>24</sup> (Dijkstra 2011: 94). Note that the peat bogs were originally higher than the rivers to which they drained. The bogs were dome-shaped, with the highest point in their centre, which would thus act as a watershed. A general, English introduction to the topic is TeBrake 1985,

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<sup>24</sup> "the systematic drainage of the land in the form of elongated plots and bringing under control the water level, so that the land can also be used for agriculture".

who mainly focuses on South Holland. De Bont 2012 and 2014 offers detailed, up-to-date explanations of the physical and human aspects of peat reclamation.

It is unknown when peat reclamations in the Low Countries first started, but there is some consensus that northern North Holland and Fryslân set the ball rolling. For North Holland, Besteman 1990: 110–1 suspects that reclamations had started on a modest scale in the Carolingian period, judging by toponyms in *-more* ‘moor’ which are attested for the ninth century in locations around Texel, in West Friesland and in Kennemerland. It is thought that this toponym refers to the original presence of a peat bog (see also de Cock 1969). There are also some archaeological finds which attest to human activities within the northern peat bogs. Some place-names in *-heem* in the area suggest a pre-1000 origin. By the tenth century, reclamations had also started in the bogs directly east of Kennemerland, such as in Assendelft. On the basis of toponyms and a geographical reconstruction of the reclamations, de Bont (2014: 127) concludes that the eastern part of the Kennemer bogs up to the Great Hollandish watershed (that is, the area to the southwest of modern Amsterdam) had been largely reclaimed by the year 1000.

It is unclear why the reclamations were started precisely in this period. Besteman (1990: 93–6, 110) enumerates a number of push and pull factors:

- The old areas of settlement, on the older dunes and along the few inhabitable river banks and on Pleistocene sands, such as Texel, may have become overpopulated due to population growth since the Merovingian period;
- Sand-drifts in the dunes caused the loss of agricultural land and eventually of settlements, forcing people to look for new territories;
- The peat bogs may have become drier in the centuries leading up to 800 due to improved drainage, which itself must have been the result of the inroads made by the North Sea on the land: the creation of the Rivers Reker (between Kennemerland and West Friesland) and Marsdiep (south of Texel), and the widening of the Vlie which led to the rise of the Zuiderzee;
- The aforementioned new waterways also caused the loss of previously inhabited or cultivated land.

Ultimately, it was probably a combination of human factors (overpopulation, desire for increased agricultural gain) and natural causes (improved drainage, loss of agricultural and inhabitable land to the sea and to the shifting dunes) that impelled people to convert the peat into agricultural land. Once the process was under way, subsequent changes, such as the oxidation and lowering of the land, and the economic and demographic dynamics, imposed the continuation of the reclamations. Historians have also pointed to a “run for the bogs” (*wedloop om het veen*) between the bishop of Utrecht and the count of Holland in the eleventh century as far as the

peat bogs between the coast and the Vecht are concerned. Thus, the actual speed and direction of the reclamations may in part have been determined by political factors.

Several parts of North Holland have been studied in great detail as far as their reclamation history is concerned. For West Friesland, see de Cock 1969, for Kennemerland, de Cock 1965 and Koene, Schweitzer & Morren 2003; a case study of Assendelft is provided by Koene 2010: 21–58. For southern Kennemerland (south of the IJ), Waterland (northeast of Amsterdam), Amstelland (Amsterdam and its southern and southeastern hinterland) and, more briefly, the northern Vecht area, see the comprehensive treatment in de Bont 2014.

The date of the reclamations in North Holland is confirmed by what we know from Fryslân and western Overijssel. Recent archaeological insights suggest that reclamations east of the Vlie probably started around 800 south of the Frisian terp area, around modern-day Sneek. The reclaimers advanced further south and east into the bogs in the following centuries (Mol 2011: 47). For the peat regions of northwestern Overijssel, which belonged to the bishop of Utrecht (the *Oversticht*, as opposed to the *Nedersticht* which is the modern province of Utrecht), the investigations of local historical conditions by Mol 2011 suggest that reclamations had been initiated from the town of Vollenhove by 950. These were followed by clearings on a larger scale around 1050. They had a manorial structure, with colonists becoming serfs. The so-called free, commercial reclamations known from the Utrecht and South Holland context followed between 1075 and 1150 (Mol 2011: 82–83).

Northern South Holland and Utrecht, whose peat areas drained into the Rhine and the Vecht, have also been studied intensively. It is generally assumed that the reclamations started in the eleventh century and soon acquired a very organized and large-scale character. In *Nedersticht*, the wilderness which was being cultivated was to a large extent the dominion of the bishop of Utrecht, whereas in Holland, it was the count of Holland who owned (or usurped) the rights of use. In his ground-breaking study of 1956, van der Linden shows how the reclamation was organized. The reclaimed land was settled by colonists or *copers* ('buyers'), who bought the use of the land from the bishop or count in a contract called *cope* (whence the many place-names ending in *-koop*, such as *Boskoop*). The bishop or count could sell the concession of parceling the land to a *locator*, a go-between. Van der Linden himself thought that the colonists soon acquired the status of free men, but it has since been shown that most of them probably remained in a state of domain serfdom or *ministerialiteit* (Buitelaar 1993, Kuiken 2006), similar to what Mol has claimed for the Oversticht. In Amstelland, de Bont 2014: 219 tentatively identifies the original *locator* of the Amstel reclamations as the "Lord of Amstel" whose castle may have stood at the site of Ouderkerk aan de Amstel. His family was loyal to the bishop of Utrecht, and the first representative of the family is mentioned in 1105 as Wolfgerus, *scultetus de Amestello*. If this identification proves to

be correct, it would point to the eleventh century as the start of the reclamations in Amstelland. The settlers might have had an eastern origin, in Nedersticht, since Amstelland only became part of Holland in 1285.

The main developments in the reclamations of South Holland are discussed by TeBrake 1985: 185–220 (for Rijnland), Lugt 2012: 107–23 (Leiden and Zoeterwoude), de Bont 2000 (for Delfland), and others. The main rivers, the tributaries of which first served as starting points for the peat reclamations, are the Old Rhine between Leiden and Utrecht, the Hollandse IJssel between Nieuwegein and Rotterdam, and the Meuse-Merwede delta, from which Maasland (Maassluis, Vlaardingen) and later Delfland were reclaimed. A study of the toponyms in the area reveals that the oldest names are situated along the banks of the Rhine with some on the old dunes. The names in *-heem* are interpreted by Dijkstra 2011: 90–2 as a slightly more recent layer but still predating the reclamations. We find *heem*-names derived from personal names, such as *Rothulfuashem*, *West-* and *Ostsagnem*, *Upwilcanhem*, located along the Rhine and its direct tributaries. Dijkstra ascribes them to individual reclamations starting from the mouths of the Rhine's tributaries. Nearly all Old Dutch *heem*-names in Rijnland disappeared between 1000 and 1200, with the exception of Sassenheim and Hillegom, which had become parishes. The other settlements moved into the peat area and acquired new names (in *-woude*, *-veen*, *-koop*, *-dam*, *-brug*, etc.). Chronologically, the start of systematic peat reclamations in South Holland is dated by Henderikx 1987: 56–62 to ca. 950 at the earliest, which matches the data for Neder- and Oversticht. By the middle of the eleventh century, three villages in the middle of the reclamations already have churches, viz. Leimuiden, Rijnsaterwoude, and Esselijkerwoude, which were daughter churches of the church at Oegstgeest. By 1300, the largest part of the peat bogs had been brought into cultivation, but a few smaller settlements date to the fourteenth century. As to the origin of the settlers in the newly reclaimed territories, TeBrake (1985: 185–6) states that “there is no evidence of any significant migration into Rijnland from other areas. To all intents and purposes the reclamation and colonization of Rijnland's peat-bog wilderness was carried out by Rijnlanders originating in the nearby dune and riverbank settlements.” He goes on to argue that natural population growth in the western Netherlands in the relevant period was sufficient to additionally “provide colonists for numerous land-reclamations and colonization schemes elsewhere, especially in northwestern and northern Germany.” The local origin of settlers is mainly concluded from a negative argument, viz. the absence of any indication in the historical records for a foreign origin of the population. A positive indication is sporadically found in the form of the settlement names. For instance, *Scharwoude* in North Holland was probably a colony of nearby *Schoorl*, and *Zoeterwoude* in South Holland was a colony of *Zwieten*, situated downstream from Zoeterwoude along the Rhine.

For the village of Aalsmeer, Kloeke 1934: 68 introduces the possibility that its dialect could stem from migrants from Waterland (north of Amsterdam) who had moved here in the past. Kloeke does not specify when this would have happened, but notes that Aalsmeer was known to be a haven for mennonites, and that Waterland also harboured many mennonites. But this, of course, would not take us back before the sixteenth century. Kloeke himself does not rule out the alternative option, viz. that the Aalsmeer dialect simply retains more archaic Hollandish forms than most of the surrounding dialects (which were influenced by Amsterdam and Haarlem). In fact, this is now the common view, since the linguistic character of the archaic dialect of Aalsmeer fits in perfectly with the other dialects of North and South Holland (van Bree 2004: 42). The village is located at the border of both provinces. The archaic sound of its dialects is due to its geographic isolation in the past: locked in between the Haarlemmermeer to its west and other lakes on all other sides, Aalsmeer remained relatively immune to pre-1900 linguistic influence from the main urban centres of Holland.

Vreeken 2001 takes Kloeke's theory one step further: he assumes that the first settlers of Aalsmeer came from northern North Holland, where they moved away because of deteriorating water conditions. The village would have been founded by Countess Petronilla of Holland between 1125 and 1129. This date seems rather late in the context of the other reclamations, although we have no hard evidence to reject it. More importantly, the arguments presented by Vreeken for the role of Petronilla are uncompelling. Aalsmeer was donated in 1133 to the abbey of Rijnsburg, in order to help finance its foundation. But that does not exclude the possibility that the village was already several decades old. In fact, it would make more sense, if financing a contemporary project was the aim, to donate land that was already and consistently producing revenues. The linguistic justification of Vreeken's assumptions has now been dismissed.

The same chronology and geographic succession of settlements as in the north, viz. firstly along the larger rivers, then further inland, is found in the Meuse-Scheldt-Demer area (Theuws 1988: 170–7, 182–3), and in northwestern Brabant (Leenders 2013). The situation in Zealand was different because the peat which covered most of this area at the start of the Common Era disappeared due to human activities. In the Roman period, draining and clearing took place on a large scale here, see Leenders 2004: 147, de Boer 2005: 53. The drained areas oxidated and were flooded first, followed by inundations of the other peat areas of Zealand. What used to be the mouth of the river Scheldt became an estuary with salt marshes (Vos et al. 2011: 66–8). In the course of the first millennium CE, the deposition of marine sediments raised these marshes, until many of them became permanent dry land. Especially the tidal channels, inverted because of their sandier soils and now turned into creek ridges, became suitable for human habitation. The larger part of such

early concentrations of habitation are found on Walcheren, Zuid-Beveland, Tholen and Schouwen. Walcheren harboured an important trade settlement in the Early Middle Ages (of which the remnants are now located off the coast), and later, the towns of Middelburg, Zierikzee and Aardenburg developed. The first dikes to safeguard these lands from future floods were built in the eleventh century. For surveys of the medieval geographical history of Zealand and Zeeuws Flanders, see e.g. Vos & van Heeringen 1997, Kuipers & Swiers 2005: 27–42, 213–24, Beenhakker 2009, and for specific regions, e.g. Gottschalk 1984, de Boer 2005 (for Zeeuws Flanders), Dekker 1971 (on Zuid-Beveland). For the linguistic history of Zealand, this survey implies that there was probably no complete break in inhabitation. Nevertheless, the amount of land suitable for cattle grazing and later for agriculture must have increased during Carolingian times or even before. The area must have been able to sustain more people with every century, and the main question is where they came from. It is possible that most of the new settlements were populated from the ‘old land’ of Walcheren, Zuid-Beveland, Tholen and Schouwen. But since Zealand south of the Scheldt (that is, south of the modern Oosterschelde)<sup>25</sup> belonged to the county of Flanders, it is also possible that migrants came in from Flanders. At the very least, commercial activities were initiated by Flemish abbeys and overlords.

The Flemish landscape, including that which is now Zeeuws Flanders, is divided between the coastal plain and the sandy inland, and it is the former that is most relevant to our settlement history. The first references to settlements or individuals associated with settlements in the coastal plain date from the end of the eighth century. They were grants of seasonal grazing land to the abbey of St. Peter’s in Ghent, and an estate associated with at least one settlement in the coastal plain, near Oostburg (Loveluck & Tys 2006: 155). The relevance of these data for the start of human inhabitation may be small, however, since it is now assumed that the Flemish coastal plain was inhabited all through the transition from Antiquity to the Middle Ages. Soens, Tys & Thoen (2014) give the following summary of the society that may be reconstructed for the Early Middle Ages:

The populations of this coastal landscape, largely located close to tidal channels, possessed a maritime focus within a landscape which is unlikely to have fulfilled all their subsistence needs. The primary activities for the nutritional support of their households would have focused on sheep husbandry and fishing (...). The population, like others involved in specialist production of limited products, must also

<sup>25</sup>. In the Early Middle Ages, the Scheldt may have had its mouth north of Schouwen, possibly jointly with the mouth of the Meuse. This is argued by Rombaut 2009: 58–68, though it seems not to have met with general acceptance. For instance, Beenhakker 2009: 74 retains the Oosterschelde as the main artery, but concedes that the Scheldt may have had another side-branch to the north which fed into the Meuse.

have been involved in a significant degree of exchange for the provision of the cereal component of their diet, the importance of exchange networks being reflected in the presence of significant quantities of imported pottery (...). They probably exported wool or finished woollen textiles (the so-called “*pallia fresonica*”), fish and salt (...). This early medieval coastal society can be labeled a free peasant society, where most land (apart from the terps) was unembanked tidal marshland, which was held and used in common by the villagers. This was not a miserable society: from Friesland we know that such free peasant traders (“*Bauernkaufleute*”), could reach relatively high living standards. (Soens, Tys & Thoen 2014: 138–9)

The process of embanking, which started around 1000 CE in coastal Flanders, is ascribed by the authors to the “increasing pressure by territorial lords on the traditionally ‘free coastal societies’” (p. 140). They hold that the coastal wetlands were “usurped” by the count of Flanders and his agents, and that large monastic institutions would have joined in the process in a second phase. By the thirteenth century, a “densely populated peasant economy” had arisen in Flanders (p. 144).

#### 6.4 Economy and government

Trade and economical dependencies indicate the direction of human contacts and point to possible hierarchical relationships between (groups of) humans, which may in turn influence linguistic change. The political status of regions may not have had the same defining influence on linguistic habits as in modern times, but it seems likely that the territorial organization did have repercussions for the direction of change. This may especially be the case where land reclamations are involved. A well-known example is the gift of an estate of reclaimable wilderness by the king or the count to an abbey or a bishop’s church, which then organized or oversaw the clearances locally.

There is an extensive body of literature on the economical and political developments in the Low Countries in the Middle Ages. Verhulst 2002 provides a general survey of the economical system in the Low Countries in the Carolingian period, whereas van Bavel 2010 deals with the period from 500 to 1600. The development from the early medieval economy to the capitalist market economy which dominates the Low Countries after 1300 is discussed, among others, by Hoppenbrouwers (1990) and van Bavel (2010).

## Agriculture and trade

The Merovingian period is generally characterized by local subsistence economies, in which pastoral farming was very important or dominant in all parts of the Low Countries. In the most fertile areas available before the reclamations, such as Haspengouw, southwestern Flanders, Friesland and the Guelders river area, agricultural activities were mainly organized in manors, which developed from the late sixth century onwards (van Bavel 2010: 76–9, 126). There were also manors in the less fertile, sandy regions of the interior, such as the Veluwe, Overijssel, Drenthe, and the Campine region in Brabant (p. 79), but in low densities and mainly from the Carolingian period on. Serfs had to perform duties on the demesne of their overlord. Grain production became more important due to the more efficient labour division, which allowed for an increasing population especially in the Carolingian period. There were trade centres at strategic points along the main water arteries (Dorestad, Oegstgeest/Katwijk, Antwerp, Ghent, etc.) which facilitated “inter-national” trade (Vervloet 2007). Local specialization may have existed in various parts, such as sheep breeding in western Flanders.

The number, scale and scope of the various local and regional centres which can be deduced from the archaeological evidence is interpreted differently by Loveluck & Tys 2006 and Dijkstra 2011. The Frisian terp dwellers of the Carolingian period are generally interpreted by archaeologists to have been “free peasant traders” rather than an aristocracy (Loveluck & Tys 2006: 149). The latter authors extend this view to coastal Flanders, stressing the relative independence of the coastal dwellers until ca. 1000 CE: “Where the evidence is available a significant proportion of coastal dwellers in marginal landscapes also appear to have been ‘free proprietors’, although some were tied to inland estate structures” (Loveluck & Tys 2006: 161). Dijkstra (2011: 319–22) cautions that the apparent richness of the coastal settlements may partly be due to the better preservation of archaeological finds in the clay of the coastal area than on the sandy inland soils. He also regards the idea of completely free, trading peasants in the Merovingian and Carolingian period as an anachronism, which transposes a situation known from late medieval Frisia to a much too early period. Furthermore, transport is also problematic. Dijkstra adduces evidence that river transport along the Moselle and Rhine was in the hands of a small group of professionals in the ninth century, and concludes that the Frisian merchant and/or skipper was a member of a small, specialized group. Finally, as long as we do not know how imported goods arrived at their archaeological destination (by local or long-distance transport, from specialized tradesmen or from local pedlars), we should be hesitant about calling all settlements in which imported goods were excavated and which were situated along a water course “trade centres”.

## Freedom and slavery

For sociolinguistic purposes, it would be relevant if a certain region or a certain layer of the population were clearly subservient to a town or to the regional aristocracy. In the Early Middle Ages, the main societal categories are those of the free, the serfs, and the slaves. Van Bavel (2010: 75–86) summarizes our knowledge as follows. The manorial system which came into place from the sixth century – and which did not continue in an unchanged way the Roman system of *villae* with its slave population – gave the manorial lord substantial control over the peasants who lived on the manor and depended on it. “Serfs were not allowed to leave the manor without the lord’s consent and owed part of their labour and specified products to him”. In addition to working their own tenured land, serfs were also required to work on the lord’s demesne land and provide other services. An advantage for the serfs, which must have played a role in the acceptance of the manorial system by the unfree, is the pledge of protection by their lord in times of insecurity (p. 80). Van Bavel adds that there were diverse forms of manorial organization. In some cases, “the stress was more on levies than on labour services, and the manor did not have a large demesne” (p. 75). Hence, “there were many degrees of freedom or unfreedom, resulting in diversity, in law and in practice, even after people were integrated into a manorial regime.” Manorialism is regarded as an “exploitative”, that is, non-contractual and involuntary relation between the lord and his serfs. The latter had only limited mobility, but had more secure access to their land compared with later centuries. We have already seen that the density of manors differed per region, with the largest number of manors on the most fertile soils (Haspengouw, Guelders, etc.), smaller manors on the sandy soils, and their nearly complete absence elsewhere (e.g., in Holland). Thoen 2001: 106 states that “serfdom (in the classical sense of judicial dependence) was weak in Flanders.”

Historians agree that slavery – as opposed to serfdom – gradually disappeared from western Europe after the Roman era. In the Low Countries and northern France, slaves were replaced in a relatively short period of time after 700 by tenants and serfs, except maybe for Frisia, where they remained until the early ninth century. In the new situation, previously enslaved people merged socially with the class of serfs and impoverished freemen into a heterogeneous category of serfs. In southern France and in Italy, slaves were still commonly employed until the tenth century, and the trade in slaves remained alive in the southern Low Countries until at least the eleventh century (p. 77). At least up to the ninth century, it is thought that the Frisians played an important role in trafficking slaves from Scandinavia and the Slavic countries to southern Europe. Van Bavel ascribes the replacement of slavery by serfdom in the Low Countries to the economic success of the manorial system,

with its better possibilities to adapt to economic fluctuations than a system with permanent slavery. Also, labour-saving changes between 800 and 1200, such as water mills, sickles and scythes, heavy ploughs and horses made it less profitable to keep a large population of agricultural slaves. Christianization and the notion of inherited freedom (in Frisia) can merely be regarded as additional factors in the demise of slavery in the Low Countries.

We are now in a position to judge the merits of Buccini's proposal (2010: 309–12), viz. that slavery was an important part of the Merovingian economy, and that, of the local Ingvaemonic-speaking population of the Low Countries, "many [were] probably enslaved", whereas others were "bound with onerous debts of work on [the] Frankish-run estates" (p. 310). Buccini brings this argument in a bid to explain the linguistic changes in the coastal area, in particular, the shift from Ingvaemonic to Franconian. According to his reasoning, the conquest of the coastal Low Countries by the Merovingian Franks would in part have been motivated by the capturing of slaves. Gradually, the slave population would have been absorbed by the peasant population. The slaves' (Ingvaemonic) dialect would have been stigmatized, which would explain the low status of many coastal Dutch forms in Dutch. This theory is at odds with the absence of evidence for manorial organization in Holland and in western Flanders. Also, western Flanders, Zealand and Holland were only thinly populated in the Merovingian period. For the dunes and river banks of South Holland, Dijkstra 2011: 97–103 calculates that the total farming population may have been between 2,400 and 3,100 inhabitants. The non-farming population would certainly have been very small. Such numbers would hardly make for an attractive goal for slave-raiding. All in all, the slavery argument brought forward by Buccini fails to convince. Of course, one might argue that the same linguistic scenario would hold if we replace slaves by serfs. That is, if we shift the stage to the eighth or ninth centuries in Flanders, and assume that the local serf population, which may have become more numerous, outnumbered the Carolingian overlords whose speech they nevertheless started to adopt.

## Developments after 1200

In the early stages of urbanization, between 1100 and 1300, the core areas of economic activity in the Low Countries were Flanders and Artois. Whereas towns in Flanders had already developed in the twelfth century, Holland became "stedenland"<sup>26</sup> (Hoppenbrouwers 2002: 118) in the thirteenth century, with Dordrecht,

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<sup>26</sup>. "city land".

Vlaardingen, Leiden, Haarlem, Alkmaar and Delft at the forefront, followed by a number of smaller urban nuclei, such as Amsterdam and The Hague (Renes 2008). During proto-industrialization, in the fourteenth to sixteenth centuries, Flanders remained one of the core areas, but the centre of gravity subsequently shifted to Brabant (1300–1600), and, especially after 1585, to Holland (Blockmans 2010, van Bavel 2010: 372–409).

The historians' observations are largely in line with the origin and the direction of spread of linguistic innovations in this period, as has been observed by many linguists. In Early Middle Dutch, the area with most linguistic innovations seems to be West Flanders, and Brabant adopts certain features from its western neighbour Flanders, such as *h*-loss and the fronting of WGM. \*ū (Willemyns 1997: 175). During the thirteenth century, Brabant also develops its own innovations, such as unrounding in *zullen* and schwa syncope in verb forms (Mooijaart 1992: 309–12). The Hollandish scribes are influenced by scribal practices from Flanders (Berteloot 1984: 100), and the language of Utrecht loses some of its eastern features and gains southern ones (such as *l*-vocalization in \*alT, \*olT, and diphthongization of \*ē to ie; Pijnenburg 1997: 72). After ca. 1400 (Willemyns 1997: 175), and in particular after 1550 (Taeldeman 1985: 194), linguistic features start to spread from Brabant, westwards into East Flanders and eastwards into western Limburg, respectively. After 1550 there is also a clear spread of Brabantish features into Holland and Utrecht (such as -cht for -ft, and the diphthongization of MDu. /i:/ and /u:/). In Modern Dutch, we find that the archaic, medieval features of South Hollandish, in which it used to agree with North Holland and Zealand, have retreated to the previously most isolated coastal villages, whereas the urban centres have become more 'Brabantish'. In turn, since the seventeenth century, the language of urban Holland has exerted a strong influence on Utrecht and the eastern provinces beyond (Kloeke 1927). See Willemyns 1997: 180–86 and Goossens 2008 for general surveys.

## 6.5 Frisia

The erstwhile frisophone character of North Holland is historically well documented (Bremmer 2008). The dialects of that province also retain a number of features which can only be explained by a Frisian substrate (see the summary in van Bree 2012). It is less certain whether and to what extent the coastal area south of the river IJ was fully or partly frisophone at any time before the twelfth century (Bremmer 2008), and it is controversial whether Zealand and Flanders were also Frisian territory at any point in time; a summary of scholarly opinions can be found in Krogh 1997: 22–3. Here we will review the main indications for the extent of Frisia and of the Frisian language south of the IJ before 1200.



Map 3. The limits of the Lex Frisionum (ca. 802–803) and the Utrecht diocese (ca. 780). (taken and translated from Dijkstra 2011: 360, Figure 8.6)

According to the Lex Frisionum, collected at the beginning of the ninth century when the area called *Frisia* was at its maximum size, it was delineated by the river Weser in the northeast (in reality, by the eighth century, Frisians may already have started to colonize what would become the North Frisian islands off the Schleswig coast) and the Sincfal in the southwest (the later Zwin). The diocesan division of the Low Countries in 695 made Utrecht the seat of a bishopric stretching from the Sincfal to the northeast, including the later provinces of Zealand, Holland, Utrecht,

Fryslân, Drenthe, northwestern Guelders and western Overijssel. The border between Frisia and Flanders may in the late seventh century have coincided with the southern limit in which Willibrord preached (Lebecq 1984 I: 103–5). This has been interpreted as a sign that all of this area was Frisian, in an ethnographic and/or linguistic sense, but of course we cannot be sure. For instance, Blok (1978: 28) states about the Carolingian division in 839 that Frisia north of the Meuse fell to Lotharius, whereas Frisia south of the Meuse fell to Charles. Yet the text of the Annales Bertiniani, to which Blok explicitly refers, only states *ducatum Fresia usque Mosam* ‘the duchy of Fresia up to the Meuse’ for Lotharius’ share, and *inter Mosam et Sequanam* ‘between the Meuse and the Seine’ for a certain part of Charles’ share, but there is no mention of a Fresia south of the Meuse (ed. Waitz, 1883, p. 21). The term *Fresia citerior* is used once by Bede in his Ecclesiastical History, book V, 10. It is often assumed to have been a generally used term for ‘Frisia closest to England’, that is, the Dutch coast of Zealand and Holland (in Lebecq’s view) or ‘Frisia closest to Austrasia’. The latter interpretation is probably correct, but this does not necessarily imply that Fresia citerior lay south of the Rhine, as many historians assume. It seems that Dorestad and Utrecht were part of Bede’s Fresia citerior, but both are situated on the Rhine. It certainly does not follow that Zealand (south of the Meuse) or even South Holland (south of the Rhine) belonged to Frisia. How far inland Frisia stretched is unclear. In many accounts, Utrecht and Dorestad are placed in Frisia, and traders from Dorestad were generally referred to as ‘Frisians’ throughout Europe in the eighth and ninth centuries (Lebecq 1984, *passim*). But there is also some agreement among historians that ‘Frisian’ should not be taken as a linguistic definition, at least, not for the areas which were to become Utrecht, the Betuwe, and Overijssel. A toponymical argument for this view is the name *Fresionowic* ‘Vreeswijk’ for a settlement at the junction of the Lek and the Hollandish IJssel, which is attested in the Utrecht Register of Goods. The name suggests that, in that area, the presence of Frisians was noteworthy.

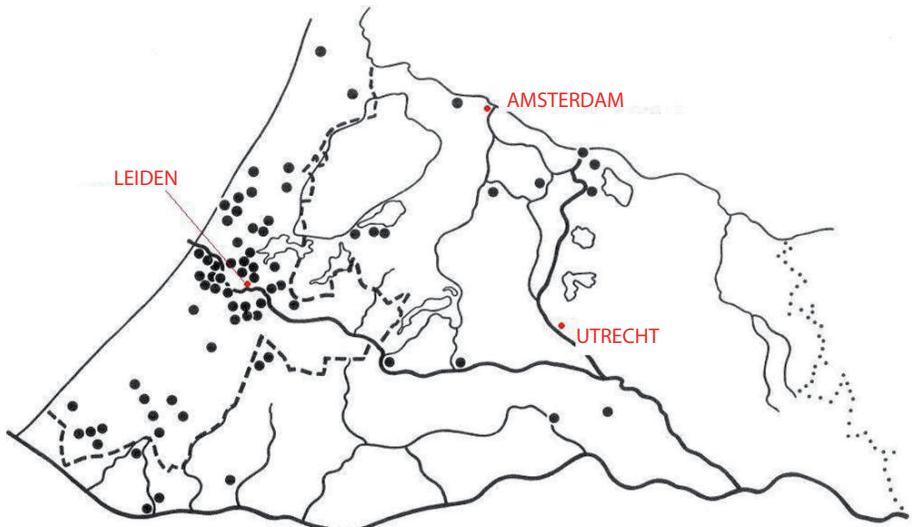
Linguistically, a number of juridical terms provide clues to the erstwhile frisophone – or, if we want to be very careful, at least *partly* frisophone – character of southern Holland and western Utrecht. The phonetic form of these words can only be explained on the basis of Frisian developments, and the terms are restricted to an area bordering on historical *Frisia*.

Old Frisian *ā-sega/-siga/-syga* ‘law-sayer’, cognate with Old Saxon *eosago*, was borrowed into Hollandish as /a:sige/, yielding Late Medieval Dutch *asighe*, *asich*, *azing* ‘officer of the law’. Asega jurisdiction is thought to have applied in all of Holland from Rijnland between Katwijk and Bodegraven northward, and in the later province of Utrecht west of the river Vecht (Blok 1963: 248, 255–61). In Rijnland, the institution of *asichdoem* or *aasdōm* ‘asegahood’ lasted until the end of the sixteenth century.

Hollandish *aft* ‘lawful’ is a loanword from Old Frisian *äft*, *eft* ‘in accordance with the law; married’. *Aft* occurs as a variant for Standard Dutch *echt* in a number of Middle and Early Modern Dutch rules and stipulations from South and North Holland, mostly in the fixed collocations *aft(e)n)dach* ‘lawful day for judgements’, *aft(e)n claghe(n)* ‘lawful complaint(s)’, and *aftenstoel* ‘seat of the judge’.

Old Frisian *bodthing* is a ‘court case on invitation’, which the count could call once every four years, and which lasted for one week (Blok 1991: 20). The compound may contain the abstract \**buda-* ‘bid, invitation’ or a truncated form of the agent noun \**budan-* ‘envoy’. The assimilation of *d* to *th* (which became *t* in Frisian but *d* in Franconian) yielded Old Frisian \**botting*, attested as *buttink* ‘a certain tax’ in two Latin documents from Egmond in North Holland (1130–61), but the noun reads *buding*, LOC.PL. *büdingun*, in Latin sources from the Franconian area of the twelfth century (ONW s.v. *botthink*). Documents from the Hollandish chancellery in the Hague between 1280 and 1342 mostly refer to it as *bottinghe* (DAT.SG.), once *buttinghe* (1321), with Frisian *-tt-*, but *-dd-* is also once found (*boddinc* 1332). Gosses (1915) had determined the areas in which *botting* was known in the twelfth to fourteenth century in Holland, viz. Kennemerland, western Rijnland, western Delfland, and maybe the town of Rotterdam. He originally suggested that this represented the inhabited area in the early eleventh century, which was concentrated on the old dunes and along the mouth of the Rhine. The *botting* area would have been restricted to the westernmost reclamations only. Blok (1991: 18–25) discusses the problem and, hesitatingly, supports Gosses’ conjectural date of 1064 for the introduction of the *botting* by the bishop of Utrecht in Frisia west of the Vlie, but not in Maasland and Vlaardingen, where in 1086 Dirk V had started to rule.

A clearly North Hollandish noun is *deimt*, *deint* (Boekenoogen 2004: 88), a borrowing from Old Frisian *deimeth* ‘the amount of grassland a man can mow within one day’ (corresponding to MDu. *dachmaet*, Low German *Damet*). Rentenaar (1972: 294) gives a map of the spread of *deimt* in North Holland. There, the noun is restricted to eastern regions (West Friesland, Waterland). Bremmer (2008: 290) suggests that this distribution “could mean that the surface measure became popular only after the year 1000 (by estimate) and is a possible indication therefore, of the extent to which Frisian was spoken at the time”. That is, Frisian would have already retreated to eastern North Holland in the twelfth century. Although this interpretation is not compelling (the word could have had a larger spread at an earlier stage), it does seem likely that the word has always been restricted to North Holland, and was therefore borrowed at a relatively recent date. A typological parallel is the borrowing of the same Old Frisian word, but in the local East Old Frisian form \**dīmēth*, into East Frisian Low German *Dimaat*, *Dimt* (Spenter 1983: 772).



Map 4. Toponyms of Frisian or coastal Dutch origin in South Holland

Among the evidence for the erstwhile presence of Frisian in future Holland are a number of toponyms which, in their medieval and/or modern form, show linguistic traits belonging to Old Frisian. For example, near Leiden, *Radenburch* (12th c.) became *Roomburg*, and *Forschate* (11th c.) changed to *Voorschoten*. These compounds contain WGm. \**rauda-* ‘red’ and \**skauta-* ‘corner, section’, which had become *rād*, *skāt* in Old Frisian, but *rōd*, *schōt* in Old Dutch. Similarly, the name of modern-day Zoeterwoude near Leiden is clearly the result of a conscious translation to Franconian of erstwhile *Suetan* (attested in the tenth century), which represents Old Frisian *swēten* from Proto-Germanic \**swōti* ‘sweet’. The name may have been motivated by local hydrography. Blok (1959b: 17) suggests that the small river to which *Suetan* originally referred may have been the first stream of ‘sweet’ (drinking-) water when one sailed up the Rhine from the North Sea. This solution is supported by the fact that, on the palaeogeographical map of Holland in ca. 750 AD (see Map 2 above), the salt marshes stretch just beyond the confluence of the Rhine and the \**Swēte*.

Map 4 (after Blok 1959a, map I) indicates toponyms in southern Holland which by their phonological make-up betray a Frisian origin or contain coastal Dutch features.<sup>27</sup> They are clearly concentrated around Leiden, Rijnsburg and Noordwijk, but can also be found in Delfland and at other inhabitable places from around the year 1000.

<sup>27</sup> Blok (1959a: 17–22) gives the following enumeration of the phenomena subsumed on Map 4: 1. Disappearance of *n* before *th*, *s* plus rounding of a preceding *a* to *o*; 2. *â* < *au*; 3. *a* < *ai*; 4. *i*-mutation of *u* > *i*, *e*; 5. *i*-mutation of long vowels and diphthongs; 6. *iu* as a rising diphthong; 7. apocope of after *l*; 8. *thth* > *tt*; 9. *th-* > *t-*; 10. *hs* > *ks*; 11. *ag* > *ei*; 12. genitive plural in *-a*. Except for nr. 7 (which is disputable) and 12 (which is morphological), these items will be discussed in the present study.

Another source of evidence consists of personal names. Of course, people are mobile, so the presence of a Frisian-like name in Zealand or Flanders does not have to mean that the area itself was frisophone. In North Holland, the Frisian character of anthroponyms until ca. 1200 is quite clear, even if most of the Old Dutch sources in which the names occur were written in Franconian territory, so that many names may have been defrisianized in written transmission (Quak 2012a). In the thirteenth century, a number of Frisian phonological features remain in the North Hollandish names, though most of the names found after 1260, including the hypochoristic ones, already conform to the pattern found further south (de Vaan 2012b: 116–17, Bremmer 2012: 128).

A few onomastic elements in Holland have clear morphological links with Frisian. Van der Schaar 1953: 199–201 points to the diminutive names in *-tet*. In Frisian, diminutives in *-(t)et* were formed on monosyllabic stems, e.g. *Aget* (to Age), *Aitet* (to *Aje*, *Aite*, *Ait*), *Altet*, *Diedet*, *Eltet*, *Galtet*, *Wultet*. In North Holland, Middle Dutch names in *-tet* are also derived from monosyllabic stems. Van der Schaar therefore interprets them as frisianisms: *Aiftet* (1343), *Aeftyt* (1514 near Hoorn), *Altet* (1108), *Eltet* (1343), *Entet* (1343), *Ettet*, *G(h)eltet* (Bommel 983, Egmond 1162, Vronen 1343, Nuwelant 1345), *Meintet* (Bommel 983, Alkmaar 1116), *Meintetus* (Medemblik 1118, 1130, 1127), *Mentet* (Vronen 1343/4), *Oistet* (Grootebroek 1343, Vronen), *Oytet* (Outdorp, Vronen 1343), *Rictet* (near Assendelft 1182–1206), *Witet* (Alkmaar 1116).

Modern Westerlauwers Frisian *boai* ‘boy’ seems to have a counterpart in Middle Dutch *booi*, *boye* ‘son’ or ‘brother’, attested in names in North and South Holland. Examples from South Holland include *Diddeboy* (1343), *Hanneboy* (1317), *Clayboy* (to *Claes*) (1334), *Moneboy* (1337), *Nanneboy* (1334), *Neyteboy* (1344), cf. van der Schaar 1953: 201. For *haringhe hughe pauels boye* (Dordrecht, 1284–85), VMNW assumes that *boye* means ‘brother’, since a *hughe pauwels broder* occurs in Dordrecht at the same time. In Flanders, Early MDu. *boye*, *boeye* is attested as an appellative and a surname, e.g. *jhan die boie* ‘Boy John’ (Bruges, 1279). Hollandish *-boy* can be derived from PGm. \**bōjan-*, cognate with reduplicated \**bōban-* whence MoHG *Bube* ‘boy’, MoDu. *boef* ‘villain’ (Seibold 2011: 157). It is difficult to explain as a frisianism: even if MoWF *boai* is derived from the Late OFr. by-form *broar* from OFr. *brōther*, *brōder*, *brōr* (as suggested to me by Jarich Hoekstra; see Heeroma 1970: 120 for the co-occurrence of *broer* and *broar* in Frisian), *broar* presupposes the loss of intervocalic *th*, which is dated to the fifteenth century in Westerlauwers Frisian. If coastal Dutch *boye* were a loanword from a Proto-Frisian word with the same *th*-loss, the latter change would have to be dated incredibly early in the southwestern dialects.

Another possibly Frisian name in South Holland is *Nanne*, Old Frisian *Nanna*, which in VMNW occurs thrice as *Nanne*, GEN. *Nannen*, in charters from the Hollandish chancellery (1280–87). In CRM14, *Nanne* is found in Haarlem, Amsterdam (once even with unreduced second vowel as *nannakiin* 1396), Delft and Gouda, besides

in Groningen and Kampen. In Fryslân and Groningen, it is generally regarded as an abbreviated form of Johannes (Debrabandere 2003: 889). Yet a hypocoristic first name *\*Nanne*, male and female, is also underlyingly present in the Brabantish and Limburgian surnames *Nenkinus* (Gotem, 1260) and *Nennen*, *Nennens* (from the 14th c.), cf. Debrabandere 2003: 889. Hence, it is not completely certain that South Hollandish *Nanne* is a Frisian relic.

## 6.6 Holland

The beginnings of the county of Holland are discussed by Blok 1991. The name probably goes back to the toponym *Holtlant* in the Utrecht Register of Goods of the ninth century (transmitted in a copy from the eleventh century). It seems likely that *Holtlant* refers to a location in Rijnland, and local geography suggests that it was located on the older dunes or on the banks of the Rhine or one of its immediate tributaries. In the area north of Leiden we still find the toponyms *Voorhout* and *Noordwijkerhout* which contain *-hout* ‘wood’. *Holtlant* may thus originally have referred to the wooded, sandy soils on both sides of the mouth of the Rhine (Blok 1991: 14), which was the original power base of the Gerolfing counts. Their lineage ruled Holland from ca. 885 to 1299. Gerolf, who was referred to as *comes Fresonum*, assumed power around 885 when the East Franconian King Arnulf endowed him with, among other things, an area near the mouth of the Rhine. In the next decades, the territory of his successors was expanded by several royal gifts which may have had the aim of strengthening the count’s position in defending the coast against the Vikings. In the tenth century, the Gerolfings rule from the mouth of the Meuse to the Vlie.

Burgers (1999: 204–5) has shown that already in the 1060s, the county is referred to as *Holdland* on three occasions (*Florentius comes Holdlandensis*) in the *Annales Egmondenses* of the abbey of Egmond in North Holland. At the same time, foreign reports still refer to the area as *Frisia*, *Fresia*. This shows that the name shift in non-local usage occurred around 1100. In 1101, *-ltl-* has assimilated to *ll* and the name appears as *Hollant* (*Florentius comes de Hollant*). Burgers (1999: 206) explicitly links the expanded application of the name *Hollant* to the peat reclamations in the area. Such a link would be understandable in view of the other (indirect) indications which suggest that the western part of the Holland/Utrecht peat area was reclaimed by people from the old land close to the mouth of the river (e.g., from towns such as Oegstgeest and Rijnsburg) and from the old settlements on the river banks (such as Koudekerke, east of Leiden).

According to Burgers (1999: 207–9), the process of peat reclamations was to a large degree responsible for the detachment of Holland from Frisia in name and

identity. The onomastic evidence, as we have seen above, shows defrisianization of a number of toponyms in South Holland. Burgers hypothesizes that among the reclaimers of the Hollandish-Utrecht fenlands, there were speakers of Franconian dialects from further inland. In this way, the ethnic and cultural homogeneity of the original county (of what became Holland) gave way to diversity, “waarbij de oorspronkelijke Friezen ten zuiden van het IJ in de 11e eeuw blijkbaar een minderheid gingen vormen”<sup>28</sup> (p. 207). The Frisians became concentrated in West Friesland, and the county split into a non-Frisian and a Frisian part. Cultural differences as well as the spatial separation may have led to an increased sense of identity among both peoples, according to Burgers. A toponym such as *Vriesencop* (South Holland, 1275) seems to testify to the perceived foreignness of “Frisians”. In the twelfth century, the animosity between the Frisians of West Friesland and the Hollanders of Kennemerland is an established fact.

As attractive as this scenario may be when looking for the motives for the linguistic franconization of South Holland, it is clear that it requires some assumptions for which we have no positive evidence. We do not know whether the coastal area was “ethnically and culturally homogeneous” to begin with, nor do we know whether the Frisians became a minority in their own county in the eleventh century due to inward migration of people from further east. In particular, the alleged large-scale immigration of speakers of other dialects is not proven by any records. The alternative view, viz. that the reclamations were carried out by local people, who for social or economic reasons adopted the speech of Utrecht and beyond, is still a possibility. The western Dutch reclamations started in a period (around 1000) and in a region which lacked a pre-existing manorial structure and where no (significant numbers of) slaves were available anymore. “The main organizers were the territorial lords, the Count of Holland and the Bishop of Utrecht giving their vassals or stewards, religious institutions, or others the right to develop the organization on the ground as entrepreneurs” (van Bavel 2010: 83). People had to be attracted to settle in the newly claimed land, and the territorial lords profited from their work through fiscal, military, and judicial revenues (p. 85) rather than through land ownership or close control of the labour force, as used to be the case on the manors. To this aim, the colonists acquired a larger degree of freedom than was customary on the ‘old land’, where pre-1000 power relations held.

28. “in which the original Frisians to the south of the IJ apparently became a minority in the eleventh century”.

## 6.7 Flanders

The rise of Flanders as a powerful region is comparable to that of Holland in many respects. After Baldwin I, who came from the Carolingian power base around Laon in northern France, had been given several *pagi* as a loan, among which the *pagus Flandrensis* (viz., modern Bruges and surroundings), his son Baldwin II profited from the power vacuum in the Low Countries which arose in the period of the Viking raids in the ninth century. At the end of the that century, he ruled in much of the area between the sea and the Scheldt, down to Artesia in the south. The name of Flanders was now applied to all of this area (see § 21.1 on the disputed etymology of the county's name). Manorial organization was almost absent in Flanders, which meant that, when reclamations started, new settlers acquired a degree of freedom similar to that in Holland. But in Flanders the count was already a large landowner on the coastal plain. He sold much of his land to religious institutions and rich burghers, who invested in the reclamations between 1180 and 1300. In this way, much larger land holdings developed in Flanders than in Holland. As a result, cities and urban elites emerged earlier and obtained stronger positions than in Holland (van Bavel 2010: 85).

# The study of language contact

The importance of language contact for the study of language change has been clear to scholars at all stages of modern linguistics. Of course, many of the early references now make a naive impression. For instance, Ypeij (1812: 303) claims that the dialects of Holland and Utrecht are “het zuiverst, of, met andere woorden, het minst gemengd met vreemde dialekten”.<sup>29</sup> Since the writings of Hugo Schuchardt (1884, 1885: 16–7) and Hermann Paul (1886: 337–49), among others, most handbooks of comparative linguistics refer to language contact as a major cause for linguistic change. The many linguistic studies since the 1880s have enormously increased our knowledge in two respects: 1. The variety and geographic spread of the languages studied, 2. The ways in which language changes internally and externally (socio-linguistically) because of contact between speakers.

## 7.1 Theory and terminology

Intimate details of language variation are particularly important when trying to gauge language change due to external interference. We may distinguish the *direct* exposure of speakers of different varieties to each other’s language from the *indirect* influence of one variety on another by the mediation of a third party (speakers or linguistic phenomena). For instance, when discussing language contact between Dutch and French in Haspengouw (southern Belgian Limburg), Kruijsen (1995, 2014) distinguishes three contact zones depending on the distance to the linguistic border. Within a radius of zero to five kilometers from the linguistic border, the French influence on Dutch dialects is the greatest, and it may be assumed to result from direct exposure of at least a significant number of Dutch dialect speakers to French. The next zone is defined between 7 and 12 kilometers from the border, and the third zone is situated at around 25 km from the French linguistic area, and is even less influenced by French. Here, it may be hypothesized that French influence was filtered through the primary and secondary contact zones, and needed no or few speakers who were in direct contact with French. Another, more widely known example of a similar tripartite division is the distinction made by Pfister

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<sup>29</sup> “the purest, that is, the least mixed with foreign dialects”.

(1998: 236–7) between three different zones of Old Frankish lexical influence in the Gallo-Romance area: (1) A narrow border strip running from Picardy to Lorraine, in which heavy Frankish lexical influence can be observed in all semantic fields, pointing to a long period of bilingualism between adjacent dialects; (2) An intermediate area between the aforementioned northern strip and the Loire, which was part of the early medieval Frankish power base and hence underwent significant superstrate influence in specific semantic fields, e.g. warfare and administration; (3) The remainder of France, where Frankish words mainly entered through the vehicle of Merovingian and Carolingian chancellery speech.

Linguistic variants can basically arise in two ways, and one may also distinguish two different kinds of selection. Firstly, variation continually arises at the physiological level, that is, through the actions of the articulatory organs and the perception of the acoustic apparatus. Such variation is elementary in understanding why sounds change in the direction that they do, and why other changes are not found or rarely found. Secondly, variation also incessantly arises at the individual cognitive level, such as the parsing of speech signals into distinct phonemes, the morphological analysis of words, the metonymic extension of word meanings to other words, the metaphorical application of lexemes to completely different concepts, or the conversational implicatures that each social group develops over the course of time. These semantic and pragmatic aspects of variation are particularly relevant to etymology, the study of the development of the meaning of words, which will concern us in many of the subsequent chapters.

Language variation becomes language change through the selection of variants. Here too, it is possible to distinguish two different processes, although in the study of past language contact we cannot always tell them apart. Firstly, variants are selected at the language acquisition stage by infants adopting their caregiver's language (Tomasello 2003) or languages (see Genesee & Nicoladis 2007 for the normality of interference between the available languages in multilingual L1 acquisition). Secondly, selection will continue to take place at all subsequent periods in life due to the social environment of humans, such as their close family or their peer group (Milroy & Milroy 1985). The most critical periods for this kind of selection are childhood and adolescence, but a certain amount of selection continues all through adult life. In theory, one might want to differentiate between active, post-infancy selection, and the passive deselection of variants which may result from either the loss of cognitive faculties or the cessation of exposure to a certain variety. Particularly in situations of language shift, deselection or language attrition can play an important role (Schmid 2011).

The foundations of a more theory-oriented approach to language contact were laid in the 1950s by authors such as von Wartburg (1950), Weinreich (1953, extended posthumous edition in 2011), and Haugen (1953). Since Thomason &

Kaufman (1988, esp. 37–57) and van Coetsem (1988), the topic of language contact has become firmly entrenched in most linguistic research agendas. The literature on all kinds of aspects of language and dialect contact has exploded, involving issues such as: which elements can be transferred, what are the specific processes involved in the incorporation of transferred elements, which structural situations of language contact can be envisaged. It is impossible to provide a reliable summary here that does justice to the various subfields. Among the more recent, anglophone surveys of language contact in linguistics are van Coetsem 2000, Thomason 2001, Winford 2003, 2005, Matras 2009, Trudgill 2011, Hickey 2013b, and the various contributions to Hickey 2013a. Of specific relevance to our investigation are the topics of dialect contact (Trudgill 2010, Britain 2013) and language contact as a heuristic tool in etymology (Mailhammer 2013).

In Dutch and Frisian linguistics, the approach by van Coetsem 1988 and 2000 has been influential, in particular through the reception of his ideas by Cor van Bree. The latter has written about the theory and mechanisms of language contact (van Bree 1996: 255–303, van Bree & Versloot 2008: 21–31, 209–17), about the development of Town Frisian (van Bree 1994, 1997b, 2001, van Bree & Versloot 2008), about the Frisian substrate in northeastern Dutch (van Bree 2000, 2003) and in North Holland (van Bree 2012). See § 5 for the study of the contact between Dutch and French dialects.

The main theoretical concepts I use are taken from van Coetsem (1988, 2000), but many aspects of his theory are, in one way or another, part and parcel of all contemporary theories about language contact. As opposed to the earlier cover terms of substrate, superstrate and adstrate, which combine a socio-economic observation on the relative status of speakers of contact varieties with a judgement on the outcome of the linguistic process, van Coetsem separates the social (extralinguistic) dimension of language contact from the internal linguistic aspects. The most basic distinction at the social level is that between L1 (Language 1, usually the native language of a speaker) and L2 (a language acquired at a post-infancy stage). Of course, a speaker can be exposed to, or impose upon others, more than one non-native language, hence the optional presence of L3, etc. Van Coetsem arrives at an explicit definition of the social status of contact varieties via the term “agentivity”. This leads to the distinction between a source language and a recipient or target language.

A feature that was not stressed much by van Coetsem is the structure of the speech community in which the changes take place. As shown by various sociolinguistic studies, linguistic innovations depend for their spread on the status and the level of activity of the innovating speakers in their community. Therefore, it matters how tightly knit a community is. For innovations from outside to be adopted at all, there have to be speakers who are open to influence from outside. Hence, the degree of openness of a community also matters. In the end, it is both

the “network of relationships among speakers” (Ross 2003: 176) and the individual need or openness of speakers for outside influence which determines the speed and direction with which innovations from outside are adopted.

As regards the linguistic dimensions of language contact, the first aspect defined by van Coetsem is the kind of transfer shown by the features in question: borrowing or imposition (shift). Borrowing can be defined as the transfer of a linguistic feature from L2 to L1, whereas imposition involves the transfer of a linguistic feature from L1 to L2. The second case usually implies that the speakers of L1 are aiming to learn L2, regardless of the question whether they retain their L1 or intend to give it up (the latter may only be the case after a few generations of bilingualism).

A second aspect is the position of linguistic elements on a scale of stability or “stability hierarchy”. According to van Coetsem’s theory, borrowing from L2 into L1 favours the adoption of unstable features, such as vocabulary and derivational morphemes. Conversely, when imposition from L1 onto L2 takes place, stable elements such as phonetics and syntax get transferred more easily. This question is among the most discussed in contact linguistics: can we make out a reliable hierarchy of transferability of linguistic elements (see, e.g., Matras 2007)? Or, rephrased with van Coetsem, is there a hierarchy of the likelihood with which specific items remain stable in the speakers’ grammar as they shift from L1 to (a differently structured) L2? Van Bree & Versloot 2008 and van Bree 2012 have applied the different degrees of stability of linguistic features to their analysis of the Frisian substrate in North Holland and of Town Frisian (which turns out to be sixteenth-century Hollandish speech which started to be spoken in the towns of Fryslân and further developed in a frisophone environment).

## 7.2 The reconstruction of language contact

Indications for language contact in the past can be of language-internal nature or they can belong to the language-external sphere. Language-internal clues can be either of a synchronic or of a diachronic nature.

At the synchronic level, language contact can leave traces in irregularities within the linguistic (phonetic, phonological, morphosyntactical, derivational, etc.) system that are difficult to explain on the basis of hypothetical system-internal developments. Of course, such traces are the object of interpretation and cannot be regarded as first-hand proof for language contact. Diachronic traces of language contact can be detected by comparing different stages of the same language, or different dialects or languages. For instance, the observation of a change in morphology or syntax between different generations of speakers of the same language can be interpreted as the result of language contact if there are other factors pointing

in that direction. Many changes can also be observed in real time, viz. if we have documentation from different periods. We might witness changes between the linguistic system of an earlier period (of which we may have only written records) and that of a later age, changes of a kind that lead us to believe that language contact promoted the changes.

Language-external information about contact-induced change usually consists of the explicit mentioning of a shift in language from one period to another, or of the migration of speakers. Inasmuch as this information stems from historiography, it must be regarded as indirect and hypothetical. We are unable to check whether, to mention just one example, the “Friscians” mentioned in medieval sources indeed spoke a pre-stage of the language which we now call Frisian. For the modern period, of course, we stand on firmer ground, since sources are more detailed about the contact or migration that took place and more explicit about the linguistic features involved.

By way of illustration, I will give a concrete example as described by Maes 2012. The village of Meijel, in the southeast of the Netherlands, is situated on a small sandy ridge in the middle of a large expanse of moors, the Peel. The Peel was largely uninhabited until the late nineteenth century, and it forms the main border between the cluster of dialects in Limburg and those in North Brabant. The village of Meijel is first mentioned in a written document from 1326, and was probably founded in the thirteenth century or a little earlier. See Map 5 for the situation in the early seventeenth century.

The Meijel dialect has been described at several points in the twentieth century, and there is even an early dialect text from 1807. It turns out that Meijel has changed sides with regard to the *sch/sj*-isogloss in Limburg, the so-called *Panninger Zijlinie* or ‘Panningen Side Line’. This important shibboleth was identified by Schrijnen (1902: 252), who also gave its name (Schrijnen 1907: 82). It is the isogloss that demarcates the eastern pronunciation [ʃ-] and the western pronunciation [sx-] of word-initial \*sk- in words such as StDu. *schoon* ‘beautiful’ and *schijnen* ‘to seem’. We know from Schrijnen’s work and from the SGV dialect enquiry of 1914 that Meijel used to have [sx-] until ca. 1900.<sup>30</sup> We also know, from subsequent dialect descriptions, that Meijel must have shifted to saying [ʃ-] early in the 1900s, and that this pronunciation became general by the 1930s (Maes 2012: 57). It follows that the word-initial cluster which corresponds to Dutch *sch-* has shifted its pronunciation from [sx-] to [ʃ-] in a very short period of time, probably among speakers born at the end of the nineteenth century who did not yet serve as informants for Schrijnen’s enquiry in 1902.

30. The spelling of the 1807 dialect text does not allow us to distinguish between the relevant variants of the pronunciation of *sch-*.



Map 5. The village of Meijel (spelled Meyell) in the left-central part of the shaded area *De Peel*. Detail of the map *Nova Brabantiae Ducatus Tabula* by Jodocus Hondius, ca. 1610. The east is at the bottom of the map.

In order to explain this quick shift, Maes (2012: 59) invokes socio-economic changes in the village as listed in Lucassen 1991: 14–6. In the course of the nineteenth century, the population of Meijel grew and changed through an immigration of speakers from other Limburgian villages, who were attracted in particular by the ongoing reclamations of the hitherto uninhabited moors. In a census from 1909, only two thirds of the local population declared they were autochthonous. Twenty-five percent of the population was born elsewhere, mainly in Limburgian villages to the southeast of Meijel, such as Roggel, Helden and Heythuysen, which have [ʃ-]. Only 6% of the people born elsewhere came from [sx-]-speaking Brabant. Thus, the internal constellation of the Meijel population changed rapidly, and the variant [ʃ-] was generalized by the younger generations.

Another important factor which became influential around the same time was the increasing mobility of people due to improved roads, public transport (regional tramways) and bicycles, later followed by motor cars. Meijel administratively belongs to the province of Limburg, and around 1900, the rise of new, regionally organized agricultural unions, trade organizations, banks, sports clubs, and other peer groups, all conspired to integrate the village more into [ʃ-]-ful Limburg than it had hitherto been (Lucassen 1991: 13).

Similar studies of historical change in individual dialects have, for earlier periods, mainly been done on urban dialects. For cities we often possess more information on the demographic structure than for villages. Also, medieval and early modern written documents, in general, and geographically localisable documents, in particular, tend to be restricted to towns and cities.

An early example of the study of a city dialect is Lasch 1911–12 on Berlin. The city is located in the county of Brandenburg, which generally shows a Low German dialect variety. In the beginning of the twentieth century, the traditional Berlin dialect seemed to show a mixture of Low German and High German elements, so it used to be described as a corrupted but basically Low German dialect. Lasch shows that the Berlin dialect only agrees with Low German if the same features are found in the High German of Upper Saxony, to the south of Berlin. The features in which Berlin deviates from Low German are also in agreement with the Upper Saxon dialect, especially that of Leipzig. Since we know that Leipzig was the foremost political and cultural centre of eastern Germany to which Berlin was orientated in the sixteenth century, which is also the time when official documents in Berlin start to be issued in High instead of Low German, Lasch logically concludes that it was the High German variety of Leipzig which was introduced in Berlin around this time. Lasch also addresses the phenomenon of substrate influence, that is, she explains that the Berlin population of the sixteenth century would not have been able to faithfully copy the Leipzig pronunciation because the native phonology of Berlin's original Low German dialect would have caused a number of mismatches and replacements. For instance, instead of Leipzig *tswē* 'two', Berlin has *swē*, with replacement of the unknown affricate *ts-* by its closest counterpart, the fricative *s-*. Such a change is now routinely acknowledged as a substrate feature. Lasch furthermore signals the retention of the Low German form of some high-frequency function words, such as *ik* 'I', *det* 'that', *wat* 'what', *olle* 'old', *mank* 'many', and of "colloquial" words, such as *Kute* 'pit', *Besinge* 'berries', *kieken* 'to watch'. The retention of these and other Low German characteristics is ascribed to a prolonged period of bilingualism in the city, with the lower classes holding on to Low German longer than the higher ones.

Boyce & Howell 1996 show that much work by historical linguists, on Dutch and on other languages, has relied on the notion of 'prestige' to explain the spread of innovations through a community. They argue that modern sociolinguistics has proven this notion to be wrong, at least for a majority of cases. Instead, they propose to replace the "status-based" model of change by a "solidarity-based" one, which relies on the analysis of social networks. According to this theory, a closely-knit network with strong ties favours language maintenance, whereas a loosely-knit network with weak ties favours innovation (see Milroy & Milroy 1985, and others).

The main point of applying network theory to language change in the past is clear. In order to assess the possible influence of social history on language change, we must try to analyse the socio-economic situation in terms of the speaker networks that may plausibly have existed. Hendriks & Howell 2000 argue that the linguistic influence of the southern Protestant immigrants around 1600 on the language of Holland has been seriously overrated. According to them, "the economic

success of a given immigrant population does not necessarily translate into economic, social or linguistic influence, nor can we assume that a given immigrant group necessarily came into intense contact with the local inhabitants or other immigrant groups” (p. 265). Hendriks-Boyce (1998) has shown that the reflexive pronoun *zich* was introduced in northern Dutch by immigrants from the east who spoke varieties of Low German. These included refugees from Flanders and Brabant who first settled in the German Rhineland and only later moved to Holland. Howell 2006 stresses the fact that, for various reasons, the population of pre-industrial Europe was highly mobile, down to the remotest corners of the countryside. The poor hygiene in towns caused a relatively high urban mortality rate, which provoked constant in-migration from the countryside. Thoen 1993 investigates the origin of new citizens (*poorters*) immigrating into Bruges, a city with at least 42,000 inhabitants between the fourteenth and fifteenth centuries. At all times between 1331 and 1478, more than half of the immigrants into Bruges had traveled from over 35 kilometers away. During a peak in the fifth decade of the fifteenth century, the majority of immigrants even came from over 50 kilometers away. By comparison, the much smaller town of Oudenaerde (ca. 5,000 inhabitants), 30 kms. south of Ghent, recruited three quarters of its immigrants from at most 20 kilometers away during the whole of the fifteenth century. By and large, these proportions are still valid in present-day Europe: the bigger the city, the larger its catchment area.

“Immigration inevitably results in dialect contact” (Howell 2006: 212), which in turn can lead to dialect leveling and koineization. As a result, “the notion that each feature of a given urban vernacular must have come from a specific source dialect” must be given up (p. 223). In addition to the reduction of the number of variants (leveling), dialect contact “often yields forms not present in any of the contributing dialects, such as the collapse of Middle Dutch /i:/ and /ei/ as a single phoneme realized as [ej] in some northern Dutch urban vernaculars.” Goss & Howell 2006 illustrate this phenomenon in more detail on the basis of in-migration to The Hague in the seventeenth century with reference to the development of diminutive endings and /ei/-diphthongs.

### 7.3 Substrate layers

If a Proto-Frisian language was spoken in the western Low Countries before the area turned Franconian, the former variety can be regarded as the *substrate* which was submerged by the superstrate of Franconian Dutch. Within Europe, hundreds of known instances can be listed of one dialect or language becoming a substrate variety and subsequently disappearing. The historical details are documented better in some cases than in others. The main factors determining our judgement of each

phenomenon are the time frame of the contact (more recent contact usually leaves clearer traces) and the availability of written records of the contact varieties. For instance, we can make better guesses for Romance substrates than for Celtic ones, because Latin is attested much better than the ancient Celtic languages.

How can a substrate layer be detected in the surviving variety? Which features do we expect to leave traces in the superstrate? Does the disappearance of the original variety mean that it was always in a sociolinguistically subordinate position with regard to the surviving variety which we call the superstrate? There is no one-size-fits-all answer to these questions. In principle, any element of a linguistic system can change through borrowing or imposition. Nevertheless, we can observe some general tendencies. Van Bree & Versloot (2008) distinguish between internal and external inflexion, and between primary, secondary and tertiary lexicon. Under external inflexion they understand affixation, whereas internal inflexion refers to vocalic ablaut, such as in the strong verbs. The primary or central lexicon is defined as normal, every-day words such as ‘sleep, eat, drink, walk, sun, rain, ill’, the secondary lexicon as local and emotional words for small plants and animals, old agricultural terminology, household terms, childrens’ games, local toponymy, and emotionals. The tertiary or peripheral lexicon they define as words of “de grote cultuur”<sup>31</sup> (p. 26), such as ‘car, computer, washing machine, electricity, race, telephone, intelligent’. See also van Bree 2008a, 2012: 192 for this distinction.

Van Bree & Versloot (2008: 30) arrive at the following stability hierarchy, from most stable to least stable: 1. prosody, 2. syntax, 3. external inflexion, 4. secondary lexicon, function words, 5. derivation & composition, 6. internal inflexion, 7. lexical phonology, 8. primary and tertiary lexicon. This hierarchy reflects rather well the scale from ‘most abstract to least abstract’, or from ‘least conscious to most conscious’ linguistic features. The relevance of this general scale or hierarchy has been confirmed for many known or possible language contact situations. Stable features, such as prosody, phonetics and syntax, are more likely to signal the presence of a substrate layer than lexical phonology or the tertiary lexicon. Of course, such results can only be established through a comparative analysis, on which see below.

Van Bree & Versloot are well aware that, in particular, the boundaries between primary, secondary and tertiary lexicon are hard to determine. This has an important consequence for their practical application. Whereas the three-way distinction of the lexicon turns out to be a useful tool in determining the inherited or borrowed status of a language’s lexicon *as a whole*, the same distinction has little heuristic value when applied to individual lexemes. There is no way to establish whether a word meaning, for instance, ‘hut made out of sods or straw’, belongs to the central

<sup>31</sup> “the larger culture” or “the culture at large”.

lexicon (because people live in it), to the peripheral lexicon (because people now live in stone houses but are aware of traditional house construction), or to the secondary lexicon (because the huts look different in each village and are referred to in a deprecatory way). Therefore, the three-way lexicon distinction holds no clue to the etymology of a word: we cannot say that ‘hut’ is more likely to be borrowed from a substrate because it belongs to the secondary lexicon, or that it is probably an inherited word because it is of prime importance to the way people live. Every word can be borrowed, and every word can undergo an unforeseeable semantic shift. Therefore, only a cumulative analysis of the lexicon in different categories can theoretically yield information about substrate layers – and still there is no guarantee that the conclusion will be correct.

Of particular interest to our investigation is the case of Groningen. This province once spoke Frisian but it was defrisianized between 1300 and 1500. Moreover, it is disputed whether the town of Groningen itself was frisophone. Heeroma & Naarding (1961) defend the idea that it was. They ascribe the defrisianization of Groningen to the establishment of the episcopal court (from Utrecht) in the town. This would have caused the other members of the town’s elite to shift to an early type of ‘Town Frisian’. When Groningen also became a member of the Hanseatic league, in which Low German was the lingua franca, Groningen shifted to Low German and this variant was then adopted by the surrounding countryside, the *Ommelanden*. But the influence and, in fact, the mere existence of a linguistic Hanseatic language is called into question by Niebaum (2001: 431–9), who dismisses the frisophone status of the town of Groningen. According to him, the town represented the northermost tip of a Low Saxon wedge within frisophone territory. Unfortunately, there is currently no consensus on the matter. Van Bree (2000, 2003, 2008b) shows that some syntactic phenomena of Groningen and northern Drenthe might be due to an erstwhile Frisian substrate. Van Bree 2017 discusses evidence from all linguistic categories, and concludes that it is mainly the lexicon which provides evidence for Frisian substrate in Groningen, whereas the influence on morphology is of a more indirect nature. However, a more comprehensive study is needed to settle the matter.

Further east, along the German North Sea coast, there are of course several other areas where Low German has replaced a variety of Frisian. See for general surveys Spenter 1983: 767–77, Niebaum 2001, Scheuermann 2001, and Versloot 2001a. Here I will only mention the Low German of the region Ostfriesland, between the mouth of the Ems and the Weser. Remmers (1994) gives a general introduction to this contact situation, while his later essays treat Frisian substrate words in Low German in alphabetical order (Remmers 1995, 1996). Versloot 2013 offers an interpretation of the lexical substrate in the Low German dialects of Jeverland (northeastern Ostfriesland), where defrisianization took place in the seventeenth

century. Here, synchronically transparent correspondences between Frisian and Low German underwent sound substitution (e.g., *\*t(h)iuksel* ‘drawbar’ was replaced by *düüssel*), whereas opaque formations and Frisian words without a Low German correspondence were adopted unchanged (e.g., *dimaat* a land measure containing Old East Frisian *dt* ‘day’, *kwiddern* ‘to talk’). Some local words of Frisian origin may already have been borrowed by Low German before it spread to Jeverland although clear examples of this type are difficult to find.



## Working hypothesis and approach

The point of departure for this study is the observation that, on the synchronic, modern-day level, we can distinguish between coastal and inland Dutch. Both varieties are defined in a historical way, viz. with regard to the absence or the presence of secondary *i*-mutation. The question is whether we can set up a scenario of linguistic changes that explains how the split between coastal and inland Dutch came about. Based on the historical evidence and on linguistic clues, I assume the existence of a Proto-Frisian population along the coast down to the Rhine estuary in South Holland. The hypothesis to be tested is the possibility that the deviant character of coastal Dutch as a whole, that is, including the area south of the mouth of the Rhine, was caused by language contact between Proto-Frisian and the local Old Franconian dialects. Section 8.1 sketches the reasoning behind this working assumption and explains the analytical procedure followed in the subsequent chapters. Section 8.2 compares the historical phonology of Frisian and Franconian in the period between the break-up of West Germanic and the end of the Old Dutch period, around 1200.

### 8.1 Frisian and Franconian until 1200

The Germanic dialect continuum which existed in northwestern Europe at the beginning of the Common Era eventually brought forth the North Germanic and West Germanic language groups (Nielsen 2000a). The strict separation between the latter two entities is the result of developments in the centuries following on the Anglo-Saxon migration to Britain, which created a geographic gap between the erstwhile adjacent northwest Germanic dialects. From ca. 200 to 450, before the migration of the Anglo-Saxons to Britain, there was a West Germanic dialect continuum on the continent. The northern or northwestern part of this continuum was an important centre of linguistic innovations, such as *a > o* before NC, the loss of nasals before fricatives other than \**x*, and the (initially allophonic) palatalization of velar stops. Some of these Anglo-Frisian innovations (cf. 8.2.3, 8.2.4) spread further south than the North Sea coast, but they are only minimally represented in the central and eastern dialects of Dutch. In view of the linguistic border between Frisian and Franconian in historical times, it is likely that the Frisian language was

brought into Frisia by migrants from further northeast (Seebold 1995: 13). Judging by the hiatus in habitation in Fryslân between ca. 300 and 425, which has been established by archaeology, the newcomers filled the gap left by the ancient *Frisii* (Bazelmans 2009: 326, Nicolay 2010: 125). The latter may or may not have been speakers of a Germanic dialect.

Between 250 and 400, speakers of West Germanic cross the Roman *limes* and spread southwest into the Low Countries.<sup>32</sup> It is unclear when this spread started and how fast the Low Countries became germanophone. The two languages which we know were spoken in the area at the time were Celtic (Schrijver 1999, Schumacher 2007) and Latin (Weijnen 1999: 33–7). They may have been separated according to regions or settlements, or they may have cohabited in various places. When Celtic became extinct, is unknown.

A major bone of contention is how much continuity in habitation we may infer for the Low Countries between the Roman and the Merovingian periods. Archaeologists and, in their wake, historians, assume either a general break in inhabitation or a very severe reduction of the population between ca. 270, when sources report the withdrawal of the Roman forces from the Limes, and 358, when the Franks are said to enter the region. Yet it is also generally admitted that there is some structural transfer of settlements and organization from the Romans to the Merovingians in the Guelders river area and in the fertile loess area of South Limburg. Other areas of sporadic continuity may have included the banks of the larger rivers and the old dunes along the North Sea coast. To a linguist, the assumption of a prolonged period without any significant settlement in the Low Countries is unexpected because there is no linguistic break (i.e., no sharp dialect boundary) between the putative form of West Frankish (whence Old Dutch arose), spoken in the Merovingian period, and the dialects further east. Hence, if the discontinuity scenario is correct, the attested medieval Franconian dialects must reflect the language of the newcomers who filled the empty space. If, on the contrary, there has never been a complete break in habitation in the Low Countries, we can deduce that the language of the Franks erased all traces of earlier, pre-fourth-century Germanic dialects. Of course, these considerations only have value if there ever was

32. Van Loon (2014: 46–50) holds a different view, viz. that Germanic speakers had already moved into the southern Low Countries in the third or second century BCE, at the latest. He supports his view with the remarks made by Caesar and Tacitus on the different Germanic and Celtic tribes, and the etymology of some of the tribal names as Germanic. It is quite conceivable that he is correct, and that Celtic-Germanic multilingualism reigned for several centuries even before the Roman era, but this will make no practical difference for our purposes. We find no traces of a pre-Imperial Germanic dialect in the Low Countries that would have failed to share in later pan-Germanic innovations. To all intents and purposes, the West Germanic of the Low Countries goes back to dialects spoken there in Late Imperial times.

any significant difference between the dialects of the earliest migrants and those of the Salian Franks to begin with.

After the migration of the Angles and Saxons to England, from about 450 onwards, the continuous spread of Anglo-Frisian linguistic innovations from the north into the Low Countries comes to a halt. In the sixth and seventh centuries, the Frisians extend their influence and/or their physical presence southward along the coast, possibly bringing along Proto-Frisian linguistic innovations. Proto-Frisian and Old Franconian had experienced some centuries of separate development, as a result of which two different linguistic systems now come into contact in the Low Countries. For South Holland, there is evidence that settlers originating from the Rhine estuary went on to reclaim the sandy soils west of the bogs, between the Meuse and the Rhine and north of the Rhine, after 500 (Dijkstra 2011: 93).

From the seventh century on, Franconian starts to expand from the southeast toward the west and northwest (Buccini 2003: 206–17), which repressed some of the Proto-Frisian characteristics of the coastal dialects. According to onomastic material, such as place-names with Frisian phonology in Holland and Utrecht, the actual shift to Franconian can be dated the earliest in Flanders (if there ever was such a shift in this area), *viz.* to the ninth century, and later in Holland and Utrecht, *viz.* to the eleventh (Blok 1959a; Heeroma 1965a: 18–9). For Holland, it seems plausible to link the language shift to the large-scale reclamations of the peat bogs, even if no explicit mention of this link exists in contemporary documents. The timing is exactly right, since reclamations in Kennemerland were already well under way in the tenth century (de Bont 2014: 127). Several scholars have speculated about the nature of this link. Dijkstra (2011: 89) has argued that colonists from the Guelders river area and/or Brabant may have come west to the Meuse estuary in the ninth or tenth century. For the reclamations in Amstelland, de Bont 2014 points to the appurtenance of this area to Nedersticht until 1285, so that its colonists may have had an eastern origin. Burgers (1999: 207–9) essentially regards the reclamation of the Hollandish-Utrecht bogs as a period of ethnic admixture, in which an originally homogeneous Frisian population receives a large number of Franconian immigrants, leading to Frisian becoming a minority language in eleventh-century central Holland, and to the rise of an ethnic border with West Friesland.

We have noted above that the scenario of a language shift accompanying the reclamations introduces a number of unverifiable assumptions. In particular, there is no evidence for large-scale immigration of speakers of different dialects. Wherever we do have concrete evidence, it points to a local origin of the settlers in the reclaimed areas (thus, for instance, in Rijnland and in Kennemerland). Therefore, it may for now be preferable to regard the linguistic shift as a gradual process. In general, language histories teach us that social and economical circumstances provide stronger incentives for language shift than the mere number

of speakers. TeBrake (1985: 222–4) notes that “the coastal dwellers were physically separated from the European continent by the broad band of wilderness” which were the bogs, though of course they had access to major river routes and to the sea. For Rijnland, in particular, the silting up of the Oude Rijn at the end of the first millennium, together with the reclamation and colonization of new land, “began to reorient [the Rijnlanders] to inland areas instead.” Thus, very gradually, the inhabitants of Rijnland and Kennemerland began to dissociate themselves from the Frisians and formed their own new identity which involved a stronger connection with inland Europe. TeBrake furthermore points to the absence of any proof for “migration into the coastal regions by Frankish-speaking colonists that could have accounted for such a linguistic substitution.” He therefore prefers to see the francization of Holland as an example of acculturation, “no doubt greatly influenced by Flemish and Brabantine examples from the east and south.” Of course, in the absence of explicit proof for such influence, the only thing we can do is to “doubt” this transregional acculturation process. Lebecq (1984 I: 16) advocates a similar view as TeBrake. He writes: “portés par la conquête pippinide, les parlers francs finirent de s’imposer au cours des VIII<sup>e</sup> / IX<sup>e</sup> siècles.”<sup>33</sup> He goes on to ascribe a key role in this period to Dorestad, as a major trade centre, the rise of which was “chronologiquement associé à la domination franque sur ces régions.”<sup>34</sup> Implicitly, Lebecq’s explanation, too, presupposes a scenario of linguistic acculturation rather than replacement.

This explanation is attractive for its balance but frustratingly vague on the details. Exactly which Flemish and Brabantine examples must we envisage? Except for Utrecht, towns were not very developed in the eleventh century. And at what speed did the shift take place, and within how many generations? Is it possible that the coastal dwellers had already been bilingual for centuries, which would make the final shift easier to explain?

For Flanders, the linguistic situation is even less clear. Flanders south of the *Sincfal* does not seem to have belonged to Frisia proper at any point, though in the seventh century, the *vita* of Saint Eligius does mention *Fresiones* among the inhabitants of the Flanders diocese where the saint is converting barbarians to Christianity (Lebecq 1984 II: 48). The Old Dutch onomastic evidence for Proto-Frisian features is very meagre for the southwestern Low Countries. Still, the modern dialects suggest that, at least at some point in time, nearly all of Flanders was affected by coastal Dutch features such as the loss of nasals before fricatives, the unrounding

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33. “brought in by the Pippinid conquest, the Frankish dialects ended up imposing themselves in the course of the 8th-9th centuries.”

34. “chronologically associated to the Frankish dominance in these regions.”

of  $*\bar{u}$ , and the absence of secondary *i*-mutation. Some archaeologists now assume continued habitation in parts of Zealand and on the Flemish coastal plains from Antiquity, or in any case from Merovingian times onward. For that reason, we could assume that the Flemish coastal plain (and Zealand) in the Early Middle Ages spoke Proto-Frisian, and that this dialect, once it had become franconized, spread across all of Flanders. But in view of the relatively small size of the coastal plain, compared to the inland area where Ghent and other important towns are situated, this is not a demographically attractive scenario. An alternative solution is to hold a Romance substrate layer responsible for the coastal Dutch features of Flanders and Zealand, as per Schrijver 2014: 151. He proposes:

A Romance-speaking population that was present in the Low Countries shifted to speaking Germanic when, sometime in the early medieval period, Germanic had become the language of the socio-political elite. This population replaced the Germanic rule of secondary *i*-umlaut, which was foreign to Romance, with the Old French rule of spontaneous fronting of  $*\bar{u}$ ,  $*\bar{u}$ , and  $*u\bar{u}$ . Spontaneous fronting accordingly is an Old French substratum feature in Dutch.

As I have argued above in § 5, I think that the “spontaneous fronting of  $*u\bar{u}$ ” is a different, later phenomenon, and I also think the fronting of short  $*u$  was not a very early development. But the Flemish fronting of  $*\bar{u}$  and the coastal Dutch unrounding of  $*\bar{u}$  before palatalized geminates (see § 15.2.1) could in theory be due to a Romance substrate. If we adopt this viewpoint, the geographical spread of these features throughout Flanders becomes easier to understand, as there was large-scale bilingualism with Late Latin in all of Flanders. The linguistic similarities between the coastal Dutch of Flanders, Zealand and Holland, such as regarding the fronting of  $*\bar{u}$  and also the coastal Dutch unrounding of  $*\bar{u}$  before palatalized geminates, may then be explained from the hypothetical spread of the Flemish-Zealandish variety of coastal Dutch northward in the Carolingian period. The date which Schrijver himself assigns to the Romance-to-Dutch shift, viz. between the eighth and eleventh centuries, seems to me too late for Flanders. Also, Schrijver’s hypothesis does not deal with the Frisian characteristics of personal- and place-names in Holland, such as  $*au > \bar{a}$  and the loss of nasals before fricatives. We could therefore assume a different replacement scenario for southern and northern coastal Dutch: from Late Latin to Old Franconian in Flanders, yielding Old Flemish, and, at a later stage, from Proto-Frisian (maybe beside Late Latin) to Old Flemish, yielding Old Hollandish, in the north. Such a phased language shift from south to north would explain the nearly complete linguistic similarities between northern and southern coastal Dutch, but it would go against the idea of the language of Utrecht and, maybe, Gelders or North Brabant, being imported to Holland during and after the peat reclamations.

There may have been an additional push factor towards franconization, in the shape of the attacks by the Danes, in particular between 834 and 900, which had a negative impact on Frisian trade and which destabilized the political organization of the Low Countries in the period concerned. Just as the rise of the counties of Holland and Flanders is, in a way, the political outcome of the Viking period, the linguistic shift away from Frisian may have been caused or facilitated by a decreasing amount of trade and political cohesion within the elongated Frisian coastal area.

I arrive at the following synopsis. A straightforward interpretation of ethnonyms would have us believe that Holland and Zealand had become Frisian in the Early Middle Ages whereas Flanders had not. Flanders in the Merovingian period must have seen wide-spread bilingualism or, at least, a mixture of romanophone and germanophone settlements, which gradually formed into the later linguistic border between French and Dutch. It is conceivable that Old Flemish resulted from L1 speakers of northern Gallo-Romance who adopted Franconian speech. Since the seventh century, the economic and political influence of inland Franconian on the coastal regions increased. The eastern and southern parts of Flanders belonged to the old land, so that the linguistic border along the Dender and Scheldt cannot be ascribed to the Pippinid and Carolingian expansion: it could be older (from an earlier substrate border, or from internal development) or more recent (if western speech spread eastwards in the later Middle Ages).

For Holland north of the Meuse, we may assume the presence of Proto-Frisian speech in the Early Middle Ages. It is unclear whether Holland between the Meuse and the IJ had been monolingually Frisian, forcing us to assume a full-scale shift from Frisian to Franconian, or whether two or more varieties of Germanic coexisted within the area, in which case the Hollandish outcome may be based on a dialect that was Old Franconian in character from the start. The full-scale franconization may have started in the ninth century, and it was achieved in any case around 1100. The change could be due to christianization (if the place-names on which the Frisian case is built remained Frisian for a longer time), to Frankish dominance, to a collapse of internal cohesion of Frisia due to the Viking raids in the ninth century, to the development of supralocal overlordship in the tenth century, or to another, unknown factor. In Holland and Utrecht, the reclamations which start in the tenth century add an important element. They allow for a population increase and open up the west to trade and traffic with the Franconian central Low Countries. The population of West Flanders and Zealand may not have been linguistically (Proto-) Frisian, but it seems to have shared at least some of the linguistic characteristics of Proto-Frisian.

In Chapters 9 to 21 below, the development of consonants (9–10), original short vowels (11–15), and long vowels and diphthongs (16–21) will be discussed. After each discussion of the evidence, a provisional conclusion will be drawn which will

focus on determining whether the available evidence in western Dutch must be interpreted as the result of (1) phonological imposition from a Proto-Frisian substrate onto Old Franconian, (2) lexical borrowing from the substrate into Old Franconian, or whether (3) the evidence can be explained from internal developments within Old Franconian. In Chapter 22, the general conclusions will be drawn.

## 8.2 Contrastive historical phonology of Frisian and Franconian

A linguistic shift from Proto-Frisian to Franconian would have been accompanied by features of phonological imposition from the native language (L1) onto the newly acquired speech (L2) which we may call Old Coastal Dutch. We also expect a certain amount of lexical borrowing from L1 into L2. If this scenario is correct, the Late Old Dutch phonological system would be based on Old Franconian spoken around the eighth or ninth century (for Flanders) and around the eleventh century (for South Holland), but adapted to the contemporaneous L1 system of local Proto-Frisian or Early Old Frisian (Buccini 1995). This section provides the systematic background for the concrete case-studies which will follow in the remainder of this book, by contrasting the development of the historical phonology of Frisian and Franconian between ca. 400 and 1200.

### 8.2.1 Restriction to phonetics and phonology

The investigation will be restricted to phonetics and phonology. These fields allow for the most insightful and reliable historical comparison between Frisian and Franconian, more so than morphology, syntax, or the lexicon. This restriction is due to the specific state of the available historical records and to the basic similarity between the linguistic systems of Proto-Frisian and Old Franconian. As regards the early medieval Germanic dialectal landscape, morphological, syntactic and lexical evidence is much harder to interpret in a straightforward way than phonetic and phonological evidence. The main reason for this discrepancy lies in the nature of the oldest textual witnesses, which consist of names and a few shorter texts. Furthermore, the handful of longer texts are translations and represent only a few different locations. Whereas a number of phonological changes will inevitably show up whenever we have a minimal amount of words at our disposal, the same is not true for morphology, lexicon, or syntax. Another reason for the methodological restriction to phonetics and phonology is that phonological change will – in most cases, but not always – create irreversible changes to the system, which are bound to be traceable even after 1500 years or so. Each dialect will have its specific set of

phonological characteristics. Of course, we know that lexical diffusion and wholesale language shift may have severely disturbed and obliterated earlier changes, but on the whole, a dialect can clearly be marked as, for instance, Frisian or Franconian, on the basis of its phonological make-up. Morphology, syntax and the lexicon do not present such a sharp tool: they are much more susceptible to secondary spreading and convergence of features which obliterate earlier divergences.

The vocabulary is subject to continuous change via borrowing and semantic change. Many words are lost over the centuries and get replaced by new formations or other existing words. If, for instance, a lexeme is only found in western Dutch and Frisian, this does not necessarily imply that the word used to be absent in eastern or southern Dutch. The geography alone does not suffice to call a word a frisianism. That is why lists of allegedly Ingvaeanic words such as those compiled by Schönfeld & van Loey (1970: xxxvi) or Weijnen (1965a: 388–89, 1999: 51–56), have little value for our purpose. Microtoponymical terms such as *delf*, *dilf*, *delft* ‘ditch’, *drecht* ‘water course’, *kene* ‘creek’, *nes(se)*, *-nis(se)* ‘neck of land’, *schaar* ‘a deep gulley’, *vliet* ‘stream’, and *zijl* ‘water course, locks’ refer to geographic features found particularly in the western Low Countries, and the words may for that reason be absent from dialects further east. Only phonological features, such as the unexpected *ei-* in Dutch *eiland* ‘island’, could point to a Frisian origin (but see de Vaan 2014b on this difficult word). The category of agricultural words, which Schönfeld & van Loey (1970: xxxvi–vii) distinguish, is not distinctive either. It consists of West Germanic archaisms (*bul* ‘bull’, *wiel* ‘wheel’, *mijt* ‘pile’), specific coastal developments which are not necessarily of substrate origin (*elder* ‘udder’ is due to a local dissimilation from \**eudur*, see Kroonen 2011), and local semantic innovations (*arend* ‘part of a scythe’, *woerd* ‘male duck’).

Most of the evidence from derivational morphology is also inconclusive. The possessive adjectival suffix *-ede*, as in MDu. *driehoekede* ‘triangular’, *bullruggede* ‘hunch-backed’ (Schönfeld & van Loey 1970: 148), has been cited as a Flemish frisianism by Taeldeman (1982: 283) and is also singled out as a peculiarity of the North Holland dialect (Pannekeet 1995: 314). But in fact we are dealing with a West Germanic suffix \*-ōdja- forming denominal adjectives, as reflected in OE *hōcede* ‘hooked’, OS *hringodi* ‘ringed’, cf. Krahe & Meid 1969: 149 for Germanic, and Faltungs 1996 on Frisian in particular. It may simply have been retained longer in western Dutch dialects than in the interior. The noun suffix PGm. \*-sla(n)- is reflected as *-sel* in Standard Dutch, but it is found metathesized to *-eles* in Old English, Old Frisian and coastal Dutch. As I have shown elsewhere (de Vaan 2012a), the reflex *-ls-* is also found in northern Low German, in Ripuarian Middle Franconian, and sporadically in parts of the Low Countries which are generally believed to have generalized *-sl-*: Antwerp, Brabant, and Overijssel. I have therefore proposed that West Germanic underwent metathesis of \*-sl- to -ls- only under specific conditions,

i.e. in intervocalic position. This resulted in an alternating paradigm, from which some dialects generalized the *sl*-variant, and others, the *ls*-reflex. It follows that coastal Dutch *-eles* may be an inherited form of Old Franconian, even if it could also have existed in the coastal substrate. The suffix *-schep*, *-schip* for inland Dutch *-schap* is discussed in § 11.3. Its western reflex with a front vowel *e* or *i* is either due to generalization of a paradigmatic variant with *i*-mutation (which was present in all of West Germanic) or to phonetic fronting of \**a* in western Dutch.

Of the positional adverbs made from \**bī* ‘by’ plus a vowel-initial adverb, *binnen* ‘inside’, *buiten* ‘outside’ and *boven* ‘above’ are general throughout the Dutch area. In Flemish, we also find *bachten* ‘behind’ and *boosten* ‘to the east of’. Taeldeman 1982: 284 regards *bachten* as another ingvaeronism on account of Old English *baeftan* ‘behind’ (note also OFri. *befta* ‘behind’), but it is clear that the word formation was trivial and that the tendency to form such combinations was inherited from West Germanic.

Morphosyntactic criteria are also problematic. The merger of the dative and accusative in the pronouns (Dutch *mij*, dative and accusative), the opposition between *h*-forms and *h*-less forms of the third person pronoun (Dutch *hij* vs. MoHG *er* ‘he’), and the absence of the reflexive pronoun *zich*, represent different outcomes of the same West Germanic allomorphy. Also, the most significant isoglosses in this respect run between Brabant and Limburg rather than between Flanders and Brabant. The 3sg.pres. of ‘to be’, Dutch *is* instead of German *ist*, is found further east than coastal Dutch, and includes Limburgian. The use of *w* rather than *j* as a hiatus filler in the “verba pura” (Flemish *drawen* vs. StDu. *draaien*) is also merely the generalization of one of two existing variants in West Germanic. On the reduction of the prefix \**ga-* in western Dutch, see § 9.3.

Of course, one may ask why in these and other cases, western and often also central Dutch sides with Frisian (and English) rather than with German. It seems to me that such distributions go back to the migration period. In other words, there must already have been a dialectal distribution within the West Germanic continuum, and the dialects which settled in the central and western Low Countries shared a number of isoglosses with Anglo-Frisian, as opposed to the more eastern dialects. This is the best solution for a case such as \**fif* ‘five’, and it would work for the morphosyntax as well (in a similar vein, see Nielsen 2000a: 249–54).

In the field of inflectional morphology, Taeldeman (1982: 282–3) adduces a few nominal endings as ingvaeronisms. Yet none of them holds water. The masculine nominative plural ending *-(a/e)s* of *a*-stem nouns, famously found in the neuter *nestas* in the Rochester Poem, must be regarded as an inherited variant of Low German and Dutch (Marynissen 1995: 221–4, van Loon 2014: 73–7). It happens to survive best in southwestern and northeastern dialects of Dutch, and it has become productive in certain phonological categories, such as monosyllables and

nouns ending in MDu. *-ere*. The inflected gerund in *-ene* (Taeldeman's second Ingvaemonic feature) is also inherited from Old Dutch and can still be found in all of Middle Dutch. The Old Flemish genitive plural ending *-a* instead of Old Saxon and High German *-o*, and the nominative singular *-a* instead of *-o* in *n*-stems, must result from a chain of changes in the unstressed vowel systems of the various West Germanic dialects (Nielsen 2000a: 79–83). The basic impetus of this chain, viz. the fronting of short \**a* to [æ], may have been shared by Old Flemish.

Except for some clear traces of Frisian syntax in North Holland (Hoekstra 2012), it is impossible to identify syntactic features in western Dutch which must certainly stem from Frisian. Taeldeman (1982: 283–4) mentions the absence of inversion after adverbial complements (*Gisteren 't was koud* instead of StDu. *Gisteren was 't koud* 'It was cold yesterday'), the placement of directional complements outside the predicate (*Hij is vandaag gegaan naar Duinkerken* rather than *Hij is vandaag naar Duinkerken gegaan* 'He went to Dunkirk today'), the occurrence of *do*-support in Flemish, especially in replies, and the absence of the auxiliary *worden* in fientive (*Hij komt ziek* for StDu. *Hij wordt ziek*) and passive usage (*Hij is geslagen* for StDu. *Hij wordt geslagen*). None of these features existed for certain in the Old Dutch period, and if they did, we have no clue as to their geographic distribution at the time. For instance, *do*-support is found in some way or other in most Dutch dialects and in Middle Dutch. Of the features mentioned by Taeldeman, the different placement of complements, *do*-support, the use of *komen* for fidentives (French *devenir*) and *zijn* for passives are all found in Modern and/or Old French. On balance, Gallo-Romance seems to be a more likely, or equally likely, source for these Flemish syntactic features. For general considerations in the study of dialect contact in syntax, see Glaser 2014.

### 8.2.2 Contrastive historical phonology

In his study *British Celtic Influence on English Phonology*, Laker 2010 applies contrastive phonological analysis to two historical languages on a larger scale than most of his predecessors (listed in Laker 2010: 55). Concentrating on phonetics, phonemics and phonotactics, Laker systematically compares the reconstructed systems of vowels and consonants of Late Proto-British and Pre-Old English, the two varieties for which language contact in Britain is postulated between 450 and 700 CE.

In this way, he is able to identify the agreements and differences between the two linguistic systems, and hence the elements which were most likely to undergo change during the linguistic transfer of features from L1-British to L2-Pre-Old English which led up to L1-Old English. The result is a list of fifteen Old English items (Laker 2010: 250) which qualify for an explanation due to language contact

with Late British. A similar contrastive analysis will be at the heart of the present study. It will focus on the linguistic development of Frisian and Franconian and will reconstruct different stages in the development of both varieties.

The survey in § 6 suggests that a putative replacement of a (Proto-)Frisian variety by Franconian in the coastal area could have taken as much as five hundred years to reach completion. In Flanders, the process may have started in the eighth century, and it reached parts of North Holland only in the thirteenth century, with Frisian pockets possibly remaining for a few more centuries. These chronological differences have obvious consequences for our reconstruction. For instance, in Flanders the comparison must be based on the linguistic systems of Frisian and Franconian of the eighth century. For South Holland, the relevant system would be that of around the year 1000, and for North Holland that of the thirteenth century. In order to keep the amount of distinctions manageable, I use four reference points (RP) to compare the two systems which influenced each other in the coastal Dutch area, dated at 450, 700, 1000, and 1250 (see Table 4). In the next subsections, the developments leading up to the four reference points will be discussed for the coastal variety and the inland variety separately.

**Table 4.** Reference points in the comparison between coastal and inland Dutch

RP	Year	Coastal variety	Inland variety
I	450	Anglo-Frisian	Proto-Franconian
II	700	Early Proto-Frisian	Early Old Low Franconian
III	1000	Late Proto-Frisian	Late Old Low Franconian, Late Old Flemish
IV	1250	Old West Frisian	Early Middle Dutch

### 8.2.3 From Proto-Germanic to West Germanic

Anglo-Frisian and Franconian formed part of the Continental West Germanic dialect continuum which existed around 400 CE. This continuum had itself developed out of Proto-Germanic through a number of linguistic innovations. The nature of these innovations can be reconstructed by comparing West Germanic with (a) Gothic, which represents a Germanic dialect of people which had moved south at an early stage and thus escaped the innovations of North and West Germanic, and (b) North Germanic, the ancestor of the Scandinavian Germanic languages. Since North and West Germanic share a number of innovations which are absent from Gothic, many scholars assume an intermediate Northwest-Germanic stage, during which innovations could spread across the (later) border of North and West Germanic (Boutkan 1995, Nielsen 2000a). By 400, a number of West Germanic innovations can be distinguished which are absent from North Germanic (Nielsen 2000a: 241–7). At the same

time, West Germanic had already split into a number of separate dialects which did not all share the same innovations anymore. In the northern part of the continuum there was a group of innovative dialects that we refer to as Anglo-Frisian. They can be defined as the forerunners of the later Frisian, Anglo-Saxon and (northern) Low Saxon dialects. Anglo-Frisian may be contrasted with the remaining West Germanic dialects spoken in the interior of the Low Countries and Germany, which adopted few to none of the Anglo-Frisian innovations; see Table 5.

Although there will usually be no need to retrace our steps to the Proto-Germanic level to explain the difference between inland and coastal Dutch phenomena, it will be useful to provide a survey of my views regarding the reconstruction of Proto-Germanic, as per Table 6. It should be noted that the reconstructed system differs in some respects from the mainstream reconstruction as presented, for instance, in Ringe 2006: 214–33. The following system largely builds on Kortlandt 1996 and 2007 and assumes the presence of glottalized consonants and the implications thereof; cf. also Kroonen 2013: xv–xli.

**Table 5.** Stages in the development of West Germanic

Stage	Area	Latest common innovation
Proto-Germanic	northern Germany / southern Scandinavia	0–200
North-West Germanic	northern Germany, Denmark	200 CE?
Anglo-Frisian	North Sea coast of Germany and the Low Countries	400 CE
Continental West Germanic	Netherlands and Germany	400 CE

For Proto-Germanic I assume a series of voiceless fricatives (\*f etc.), voiceless lenis stops (\*p) and preglottalized stops (\*'p), which correspond to the traditional reconstructions \*f, \*b and \*p (< PIE \*p, \*b<sup>h</sup>, \*b), respectively. Apart from geminate \*ss, which arose from Proto-Indo-European clusters of dental stops, geminate obstruents arose in Proto-Germanic from Kluge's Law (\*Cn > \*CC in pretonic position, Kroonen 2011) and from analogical gemination of single fricatives within Germanic paradigms (see Kroonen 2011: 80–2). Geminate resonants arose through several different assimilations. I furthermore assume that the PIE voiced aspirates stops yielded plain voiced stops in Proto-Germanic (possibly with fricative allophones in intervocalic position at a relatively early date), unlike the majority opinion. The evidence for stop pronunciation is collected in Kortlandt 1988; Kluge's Law provides comparative support (Kortlandt 1991, Kroonen 2011). It is here assumed that \*ei had already developed into \*i. PGm. \*ia corresponds to the vowel traditionally termed “\*ē₂”, cf. Kroonen 2013: xxiii–iv and Kortlandt 2006. I do not regard the discussion concerning this vowel as settled but for our purposes it is not especially relevant.

**Table 6.** Consonants and vowels of Proto-Germanic

Consonants:						
Labial	Dental		Velar		Labialized	
*f	*ff	*þ	*þþ	*x	*xx	*xʷ
*p	*pp	*t	*tt	*k	*kk	
*'p	*'pp	*'t	*'tt	*'k	*'kk	*'kʷ
		*s	*ss			*'kkʷ
		*z				
*w	*ww	*j	*jj			
*m	*mm	*n	*nn			
		*r	*rr			
		*l	*ll			

Vowels:				
short	*i	*e	*u	*a
long	*ī	*ǣ	*ū	*ō
diphthong	*eu	*ai	*au	*ia

### Consonant changes between Proto-Germanic and West Germanic

1. Rhotacism of PGm. \*z and merger with original \*r. Though the result is r in nearly all Germanic languages, there is some Runic evidence to the effect that, in the early Runic period, the *r < \*z* (written as ȝ) was still a different phoneme from *r < \*r* (written as ᚱ), viz. a palatalized and/or voiceless r (Laker 2010: 79).
2. Loss of \*-z after stressed short and long monosyllables in Anglo-Frisian, Low German and most of Dutch (Boutkan 1995: 43–51, van Loon 2014: 68–71), as opposed to its retention and development to r in High German and southeastern Dutch: ODu. *he* ‘he’, *gi* ‘you’, *mi* ‘me’ vs. High German *er*, *ihr*, *mir*. Possibly, \*-z > -r was originally retained in posttonic syllables. Alternatively, words may have had two variants depending on the status of a word as stressed or unstressed (note OFri. *-er* ‘he’ used as a cliticized pronoun). In historical times, the isoglosses between enclitic *-(h)ī* and *-er* ‘he’, and between enclitic *-gī* and *-iur* ‘you’, run roughly between Brabant and Limburg.
3. Loss of \*-z in pretonic prefixes in Anglo-Frisian, Old Saxon and Dutch: ODu. MDu. *ā-* ‘out’, *te-* ‘apart’ (ODu. *ābulge* ‘wrath’, MDu. *amechte* ‘exhausted’, *te-brecaen* ‘to crush’; van Loon 2014: 71–3) versus OHG *ar-* < \*uz-, *zur-* < \*tuz-. In contrast, the stressed variant of \*uz- retained its r and yields MoDu. *oor-* as in *oorlog* ‘war’, *oorlof* ‘permission’. It has been suggested that the Old Dutch gloss

*turnichal* in the *Lex Salica* represents a prefixed noun \**tuz-nih(w)al* ‘destruction’, related to MDu. *tenielen* ‘to destroy’. In that case, stressed \**tuz-* would originally have preserved -*r* in Dutch too, with *te-* later being generalized from unstressed position.

4. Velarization of \**w* to *g* between the high vowels *i, u*: OFri. *niugun*, OS *nigun* ‘nine’ < PGm. \**newun*, OE *sugu*, OS *suga* ‘sow’ < ACC.SG. \**suwun* (Kroonen 2011). The change was still productive in Frisian when \**v* became *w*, e.g. in *si(u)gun* ‘seven’ < \**sivun* < \**sebun*, Sylt *jügel*, Helgolandic *djigel*, Wangerooge *jügel* ‘gable’ < \**gevul* < \**gebla-* (Boutkan 1998b: 80).
5. Loss of word-final \**-t* after long vowels (Boutkan 1995: 57–9, 385), e.g., in ABL. SG. \*-*öt* > Goth. adverbial *-o*. After short vowels, the loss is uncertain, but if it was lost in that position too, *t*-loss must be dated before apocope of word-final \**-e*.
6. *J*-gemination: \**Cj-* > -CC- (with C ≠ \**r*) if the root was light (that is, if it contained a short vowel plus consonant; Simmler 1981). Among the labial and dental obstruents, there is no clear evidence for a palatalized character of the new geminates, though one may suppose that they were palatalized phonetically or even, with Liberman 2007, phonemically.
7. Vowel epenthesis in word-final resonants. After the loss of short \**a* in endings, word-final sequences of obstruent plus resonant arose, as in OE *segł* ‘sail’, *botm* ‘bottom’, OS *apl* ‘apple’. The individual languages (Boutkan 1995: 172f.) mostly inserted *a* (normally in Old Saxon and Old High German) or *o, u* (before -*m* in Old Saxon and early Old High German). The same vowel *a* is found in Old Dutch, e.g. *accar* ‘acre’, *uagar* ‘beautiful’, *uogal* ‘bird’; after the eleventh century, *e* prevails in unstressed syllables.

In early Old English poems, such as *Beowulf*, metrical evidence shows that postconsonantal resonants are almost never syllabic (Fulk 1992: 87). Nonetheless, several developments in Continental West Germanic are best explained on the basis of inner-paradigmatic alternations between vocalized and non-vocalized word-final resonants. To put it more cautiously, they suggest a different behaviour of \*-CR# and \*-CR-. Cases in point are the alternations which arose from the West Germanic gemination of stops before liquids, yielding, e.g., *akker* versus *Aker-* (see below), and the conditioned metathesis *sl* > *ls*. Vowel epenthesis also predated the voicing of intervocalic fricatives (see below).

8. Lenition (voicing) of word-initial lenis \**p, t, k* to *b-, d-, g-*, and of word-internal, prevocalic \**p-, pp-, t-, tt-, k-, kk-* to *-b- (later Dutch v), -bb-, -d-, -dd-, -g- (later Dutch y)* and *-gg-*: *geven* ‘to give’, *bieden* ‘to offer’, *drinken* ‘to drink’, *graven* ‘to dig’, *liegen* ‘to lie’ (Kortlandt 2007). The lenition did not reach all West Germanic dialects.
9. Gemination of WGm. \**p, t, k* before *l* and *r*, and of \**k* before *w*, in particular after short vowels (Simmler 1974). This is found in all West Germanic languages

but has been generalized to different degrees. In some cases, languages retain traces of paradigmatic alternations, as in ODu. *-akkar*, MoDu. *akker* ‘acre’ versus the toponym *Aker-sloot*, Du. *appel* ‘apple’ but *Apel-doorn*, ODu. *quiccafe /kwikka fe/* ‘livestock’ but MoDu. *kwiek* ‘brisk’. The existence of forms with and without gemination (Dutch *appel* vs. *Apel-*) points to alternating paradigms which combined both variants. This, in turn, suggests that vocalization of word-final resonants took place before gemination initiated.

10. Metathesis *\*sl* > *\*ls* in intervocalic position (de Vaan 2012a). This gave rise to alternating paradigms with stems in *\*-isla-*: NOM.ACC. *\*-islaz/n* > *\*-sal* (or *\*-isl*) with no occasion for metathesis, but intervocalic *\*-sl-* > *\*-ls-* in the other case forms. Metathesis to *ls* was regular throughout the *ja-* and *n-* stems. The metathesis is omnipresent in Old Frisian (which has the extended suffix *\*-isan-*), but is never found in Old High German, which apparently generalized the unmetathesized sequence. Dutch takes up an intermediate position.

### *Vowel changes between Proto-Germanic and West Germanic*

1. Nasalization of *\*i*, *\*u*, *\*a* > *\*ī*, *\*ū*, *\*ā* before *\*nx*. Shared by Gothic and North Germanic. Examples: Gothic *fāhan* ‘to catch’, *leights* ‘light’, *ūhtwo* ‘dawn’.
2. *a*-mutation: lowering of non-nasal *\*i* > *\*e* and *\*u* > *\*o* before *\*a*, *\*ā*, *\*ō* in the next syllable, e.g. OE *lof*, OFri. *lof*, OS *lof*, OHG *lob* ‘praise’ < *\*luba-*. Shared by North Germanic. There are important differences between the dialects in the application of *a*-mutation (Buccini 1995: 19–43; see § 15.1.3 in this book), and it is disputed whether *a*-mutation of *\*i* took place at all. Van Loon 2014: 59–60 dismisses such a development, whereas Ringe & Taylor 2014: 34–5 give a more balanced view, arguing for a “modestly extensive lowering of *\*i* to *e* in the southern part of the W[est] G[er]m[ani]c area, usually before labial and velar obstruents which were in turn followed by nonhigh vowels”: OE *cwic*, OS *quik*, OHG *quec* ‘cattle’ from *\*kwikwa-*.
- 3a. *i*-mutation of *\*e*: raising of *\*e* > *\*i* before *\*i*, *\*ī*, *\*j* in the next syllable, e.g. OHG *deot* vs. *diutisk*, ODU. *werthan* vs. *wirthit*. Shared by North Germanic.
- 3b. *u*-mutation of *\*e*: In High German, *\*e* is also raised to *i* before *\*u* in the next syllable: OHG *nimu* ‘I take’, *hilfu* ‘I help’, *filu* ‘much’, *sibun* ‘7’, *sichur* ‘sure’. How far north this mutation reached and how regular it was, is unclear. In the Wachtendock Psalter, we find *filo-* ‘much’ in the glosses, and *uil /vi(:)l/* is also found in thirteenth-century literary texts from the Cleves/Guelders area. In Old Saxon, raising before *\*u* is also found, e.g. *gibu* ‘I give’, *tebriku* ‘I break up’, *filu* ‘much’, *Hirutfeld* toponym, though there is also a larger number of forms in which raising is absent, possibly for analogical reasons (Gallée 1993: 52–3).

Table 7. Consonants and vowels of West Germanic

Consonants:					
Labial	Dental		Velar		
*f	*ff	*þ	*þþ	*x	*xx
*p/*b	*pp/*bb	*t/*d	*tt/*dd	*k/*g	*kk/*gg
*'p	*'pp	*'t	*'tt	*'k	*'kk
			*s	*ss	
*w	*ww	*j	*jj		
*m	*mm	*n	*nn		
		*r	*rr		
		*l	*ll		

Stressed vowels:					
	Short	Long	Diphthongs		
high	*i	*u	*ī	*ū	*ea
mid	*e	*[o]			
low	*a	*ā	*ō	*ai ([ai], [ae])	*au ([au], [ao])

4. Rise of \*ea from *e*-infixation in verb stems in *-a-* and from lowering of \*ia to \*ea, e.g., in the reduplicated preterite of strong verbs of the 7th class, such as \*e-*auk* ‘increased’, \*e-*ar* ‘ploughed’, in the preterite \*e-*aj* ‘went’, and in \**hiar* > \**hear* ‘here’. Shared by North Germanic. For this hypothesis, see Kortlandt 1994, 2006.
5. Merger of word-final \*-az and \*-ā in \*-a (Nedoma 2014: 357–60). A few recent Runic finds with final -<a> confirm that \*-az yielded \*-a in Proto-West-Germanic, especially the comb from Frienstedt in Thuringia with *kaba* /kamba/ ‘comb’ (\**kamba-*) (ca. 250–300; Schmidt et al. 2011) and the Ichtratzheim spoon with *lapela* /lapela/ ‘spoon’ (\**lapila-*) (6th c.; Fischer et al. 2014). The North German footstool carrying the inscription *ksamella* /skamella/ ‘footstool’ (\**ska-mella-*), dated to 431 by dendrochronological analysis, may then be reconsidered as a real nominative form. The alternative, viz. that -a represents the accusative ending which was used for the nominative (Boutkan 1995), cannot be excluded, but it would not imply that these inscriptive forms functioned as accusatives in their context.

## 8.2.4 From West Germanic to Old West Frisian and Early Middle Dutch

### RP I. Anglo-Frisian vs. Proto-Franconian (450 CE)

#### a. Anglo-Frisian changes

The migration of the Saxons and Angles to Britain separated their linguistic development from that of Frisian. It appears that, before this migration, the Anglo-Saxon dialects shared a number of common innovations with Frisian (some of which are also found spreading into Old Saxon and parts of Old Franconian). The following list of Anglo-Frisian changes is based mainly on Kortlandt 2008; see Table 8 for the resulting system.

1. Centralization of low vowels before nasals. This often yielded rounded vowels in stressed syllables, probably [å] and [ɔ:]. Examples with \**a* are OE *land*, *lond* ‘land’, OFri. *man*, *mon* ‘man’; examples with \**æ* are OE and OFri. *mōna* ‘moon’, OFri. *kōmen* ‘they came’, *nōmen* ‘they took’, *ōne* ‘without’, *sōn* ‘soon’, MoWF *spoen*, dial. *spoan* ‘chip, splinter’.
2. Loss of nasal consonants before *f*, *p*, *s*, plus compensatory lengthening in stressed and unstressed syllables. The combination *an* yields /o:/ before a fricative. Examples in stressed position: OE, OFri. *tōþ*, *tōþ* ‘tooth’, *gōs* ‘goose’, *fif* ‘five’, *ūs* ‘us’. Examples in unstressed position: 3PL.PRES. OFri. OS -*ath*, OE -*að* < \*-*ōþ* < \*-*anþ*. This development spread to some Saxon and Franconian dialects, e.g. in ‘five’ and ‘us’, maybe also in ‘goose’ (see § 12 and 13 on these words in Dutch).
3. Reduction of unstressed vowels. Shortening affects the long vowels in Old English and Old Saxon \**ā* > *a*, \**ǣ* > *æ*, \**ō* > *o*, \**ī* > *i*, \**ū* > *u*, whereas reduction is reflected by qualitative change in unstressed vowels: \**a* > OS /æ/, OE /æ/ > /e/, and \**o* > OS /ā/, OE /ā/ > /a/.
4. Monophthongization of \**ai* to \**ā*, e.g. OE *stān* ‘stone’, *ān* ‘one’.
5. Retraction of WGm. \**ǣ* to *ā* before *w* and before *g* plus back vowel. Examples: OE *sāwon* ‘they saw’, *lāgon* ‘lay’, *māgas* ‘kinsmen’.
6. Fronting of \**a* to *æ*. This fronting was blocked: (a) by a following *x*; (b) a following *l*, *r*, *x* plus consonant; (c) in open syllables by a back vowel in the following syllable;<sup>35</sup> (d) between *w* and *rC*; (e) in some unaccented words (Bremmer 2009: 29). Examples: fronting in OE *dæg* ‘day’, *fæt* ‘vessel’, *hwæt* ‘what’, OFri. *dei* ‘day’; no fronting in OE *dagas* ‘days’, *fatu* ‘vessels’, OFri. *nacht* ‘night’, *slā* ‘to slay’ (< \**slaxan*), *falla* ‘to fell’, *hals* ‘neck’, *half* ‘half’, *flax* ‘flax’, *wax* ‘wax’, *actha* ‘eight’; *fara* ‘to go’, *draga* (but also *drega*) ‘carry’; *makia* ‘to make’ (< \**ōjan*); *swart* ‘black’, *warm* ‘warm’; *was* ‘was’.

<sup>35</sup> On this development see Versloot 2016, who argues that \**æ* was retracted before Runic Frisian \*-ɔ and \*-u, and dates this change after the spread of the F. ō-stem ACC.SG. ending to the NOM.SG. in the 6th or 7th century.

Table 8. The Anglo-Frisian system around 450 AD

Consonants:							
Labial		Dental		Palatal		Velar	
<i>p</i>	<i>pP</i>	<i>t</i>	<i>tt</i>	<i>c</i>	<i>cc</i>	<i>k</i>	<i>kk</i>
<i>f</i>	<i>ff</i>	<i>b</i>	<i>bb</i>			<i>x</i>	<i>xx</i>
<i>b</i>	<i>bb</i>	<i>d</i>	<i>dd</i>	<i>j</i>	<i>jj</i>	<i>g</i>	<i>gg</i>
		<i>s</i>	<i>ss</i>				
<i>w</i>	<i>ww</i>			<i>j</i>		<i>jj</i>	
<i>m</i>	<i>mm</i>	<i>n</i>	<i>nn</i>				
		<i>r</i>	<i>rr</i>				
		<i>l</i>	<i>ll</i>				

Stressed vowels:							
	Short		Long		Diphthongs		
high	<i>*i</i>	<i>*u</i>	<i>*ī</i>	<i>*ū</i>	<i>*iu</i>	<i>*eo</i>	
mid	<i>*e</i>	<i>*o</i>	<i>*ē</i>	<i>*ō</i>	<i>*ej</i>		
low	<i>*æ</i>	<i>*a</i>	<i>*ā</i>	<i>*ɔ̄</i>	<i>*ai ([ai], [ae])</i>	<i>*au ([au], [ao])</i>	

7. Palatalization of \**k* and \**g* before front vowels and \**j*, palatalization of \**g* also after front vowels. Palatalized \**g* merges with \**j* (except after *n* and in gemination: OFri. *lendza* ‘to lengthen’, MoE *hinge*). Front vowels at this stage are: \**i*, \**e*, \**æ*, \**ī*, \**ē*, \**eu*, \**ea*, \**eo*. Examples include OE *cēsan* ‘choose’, *giefan* ‘give’, *cinn* ‘chin’, *igil*, *il* ‘hedgehog’, OFri. *tsetel* ‘kettle’; *tziake* < \**kækōn* ‘jaw’, *tsiis* ‘cheese’ < \**käsi*, *dei* ‘day’ < \**dæg* < \**dag*, *jern* ‘yarn’ (Bremmer 2009: 31). Although the details of the phonologization of the palatalized velars are different between Old English and Frisian, and also, in some aspects, between the different English dialects and between different branches of Frisian (e.g. Kümmel 2014: 251–7), Laker 2007 argues that the phonetic beginnings of the change must lie in the Anglo-Frisian stage.
8. Monophthongization of \**ea* to *ē*. Examples: Northumbrian OE *fēll*, *fēng*, OFri. *mēde* ‘present’, *fēng* ‘caught’. This is found in Frisian and in Anglian, Northumbrian, and Mercian Old English, but not in West Saxon.
9. Raising of WGm. \**æ* to *ē*. Examples: OFri. *dēd(e)*, West Saxon *dæd*, non-WS *dēd* ‘deed’, OFri. *jēr* ‘year’, *skēp*. This development did not reach Insular North Frisian, cf. Hofmann 1964.
- b. *Continental West Germanic changes*
1. Lowering of \**ā* > \**ā*, dated before the denasalization of nasalized long vowels. The same lowering is also found in North Germanic, e.g. ON *vápn* ‘weapon’ (Got. PL. *wepna*), ON *kvámu* ‘they came’ (Got. *qemun*), ON *ár* ‘year’ (Got. *jer*). It is disputed whether this lowering took place in a common pre-stage of

North and West Germanic (which is the majority view, cf. Ringe 2006: 12–3), or independently in parts of both branches (Kortlandt 2006, 2008).

2. Reduction of unstressed long vowels and diphthongs in High German: \*ai > \*ē, \*au > \*ō; shortening of \*-ō > -o, \*-ī > -i, \*-ē > -e.
3. Establishment of voicing as a relevant feature of obstruents, hence the rise of /b/ for PGm. \*p and, in most dialects, of /p/ for PGm. \*'p.

See Table 9 for the resulting system of Proto-Franconian.

**Table 9.** The Proto-Franconian system around 450 CE

Consonants:					
Labial		Dental		Velar	
p	pp	t	tt	k	kk
f	ff	þ	þþ	x	xx
b	bb	d	dd	g	gg
		s	ss		
w	ww	j	jj		
m	mm	n	nn		
		r	rr		
		l	ll		

Stressed vowels:					
	Short	Long	Diphthongs		
high	*i	*u	*ī	*ū	*eu([iu], [eo])
mid	*e	*[o]		*ō	*ea
low	*a	*ā		*ai ([ai], [ae])	*au ([au], [ao])

## RP II. Early Proto-Frisian vs. Early Old Low Franconian (700 CE)

### a. Early Proto-Frisian changes

1. Fronting of \*ā to ā, as in OFri. bēn ‘bone’, hēl ‘whole’, skrēf ‘wrote’. This was blocked by a following \*g and \*x and by \*u, \*ō or \*wV in the following syllable, for instance, in āch, (h)āgon ‘have’, āthom ‘brother-in-law’, tāna ‘toes’ (de Vaan 2011a).
2. \*au > \*ā, as in OFri. hāh ‘high’, bām ‘tree’, etc. If Runic Frisian skanomodu contains the etymon \*skaun-, this can be dated to the sixth century at the latest (Quak 1990a: 361).
3. i-mutation of low and back vowels:

- \*u > \*ū, \*ū > \*ū
- \*ō > \*ō
- \*a > \*ā, \*ā > \*ā

- 4a. Metathesis  $Vr > rV$  before velar and labial consonants: OFri. *thruch* ‘through’ < \**purx*, OFri. *wrichta* ‘worker’ < \**werk-*, *threft* ‘need’ < \**purfti-*.
- 4b. Metathesis  $rV > Vr$  before dental consonants: OFri. *gers* ‘grass’, *berna* ‘to burn’, *Kerst* ‘Christ’, etc.

It is clear that these metatheses, and especially the one before dentals, remained productive for quite some time. Van Loon (2003: 145) mentions a possible anchor in the relative chronology in the assimilation of the velars in *bregge*, *brids* ‘bridge’ (\**bruggjō-*), *breke*, *bretze* ‘breach’ (\**bruksi-*) and *thretza* ‘to push’ (\**prukkjan*). Since these words do not show metathesis, the consonants were not yet assimilated when metathesis took place. Of course, we do not know at which point in time the palatalized consonants reached the dental place of articulation. The metathesis before *ch* was previously dated very early because of the variant OFri. *thriuch* of *thruch* ‘through’ (which presupposed metathesis before *iu*-breaking) but Hoekstra 2000 has shown that *thriuch* represents a late and insignificant variant.

5. \**e > iu* before \**xt*, \**xx*, \**xs*, \**rx*. Examples: OFri. *fuchtta* ‘fight’, *kniucht* ‘servant’, *riucht* ‘right’, *spjucht* ‘woodpecker’, *siucht* ‘sees’, *tiuche* ‘team’ (Boutkan 1998b, Bremmer 2009: 34).
6. Labial mutation: PFri. \*-*inkw-*, \*-*ingw-* > \*-*iŋʷkw-*, \*-*iŋʷgw-* > OFri. -*iu(n)* *k(w)-*, -*iu(n)g(w)-* > MoWF -*jo-*. Evidence: OFri. *diunk* ‘dark’, *siunga* ‘to sing’, *thiükke* ‘length and breadth’, MoWF *stjonke* ‘to stink’, CNFri. *jonk* ‘junk’ ‘you (dual object form)’ (Boutkan 1998b).
7. Intervocalic \**x > h > zero*, yielding OFri. *iā < \*-eha-*, (*u)ā < \*-ōha-*, *ā < \*-aha-*. Examples: OFri. *siā* ‘to see’ < \**sehan*, *fā* ‘catch’ < \**fwā* < \**fōhan* < \**fanxan*, *slā* ‘hit’ < \**slaxan*.
8. WGm. \**iu > iu*(:) or *io*(:); \**eo > ia*(:). E.g., OFri. *triūwe* ‘true’, *biuth* (3s.pres.) ‘offers’, *diūpte* ‘depth’, *diüre* ‘expensive’, *biāda* ‘to offer’, *diāp* ‘deep’, *diār* ‘animal’.
9. Pretonic \**jæ- > \*æ-* in the prefix \**ga-*, e.g., OFri. *edēn* ‘done’, *un-edēld* ‘undivided’.
10. Merger of /æ/ (< WGm. \**a*, \**e*, \**ā*) with /e/ in /e/. The merger can be dated after *i*-mutation and after *iu*-breaking (point 5).
11. Shortening of \**ā > \*æ > a* or *e* (Hoekstra & Tigchelaar 2014: 188), and of \**ē > e*, before obstruent clusters (probably after the merger of /æ/ with /e/ for systematic reasons; also after syncope). It can be dated to before the colonization of the North Frisian islands (Versloot 2014b: 53). Examples include OFri. *lēda* (\**laidjan*), pret. *latte* (\**laidide*) ‘to lead’, OFri. *stēta* (\**stautejan*), ptc. *estat* ‘to thrust’ (\**stautib-*), etc.
12. Reduction of unstressed /a/ to \*[ə], which was written as **u** in Runic Frisian; this is the interpretation of -**u** by Nedoma 2014, who interprets the vowel as

central-raised (“obermittelhohes”) [ə], viz. in NOM.SG. *skanomodu* (late 6th c.), *weladu* (ca. 600), *aniwulufu* (600–650), *kabu* ‘comb’ (8th c.), *adugislu* (ca. 700), *habuku* (ca. 800), ACC.SG. *kabu* ‘comb’ (ca. 800), and medially in NOM.SG. *adugislu* and *gisuhldu* (ca. 700).

13. Loss of final *n* in unstressed \*-an, e.g., in infinitives (OFri. *rīda* ‘to ride’, *dwā* ‘to do’), *n*-stem nouns (*hona* ‘cock’), weak adjectives (*alda* ‘old’), numerals (*thrīna* ‘threefold’), and other forms, cf. Bremmer 2009: 41.

The resulting system is illustrated in Table 10.

**Table 10.** Early Proto-Frisian system (700 CE), before the emigration of the North Frisians in the eighth century

**Consonants:**

Labial		Dental		Palatal		Velar	
<i>p</i>	<i>pp</i>	<i>t</i>	<i>tt</i>	<i>c</i>	<i>cc</i>	<i>k</i>	<i>kk</i>
<i>f</i>	<i>ff</i>	<i>b</i>	<i>bb</i>			<i>x</i>	<i>xx</i>
<i>b</i>	<i>bb</i>	<i>d</i>	<i>dd</i>	<i>j</i>	<i>jj</i>	<i>g</i>	<i>gg</i>
		<i>s</i>	<i>ss</i>				
<i>w</i>	<i>ww</i>			<i>j</i>	<i>jj</i>		
<i>m</i>	<i>mm</i>	<i>n</i>	<i>nn</i>				
		<i>r</i>	<i>rr</i>				
		<i>l</i>	<i>ll</i>				

**Vowels:**

	Short			Long			Diphthongs	
high	*i	*ü	*u	*ī	*ū	*ū	*iu(:)	*ia(:)
mid	*e		*o	*ē	*ō	*ō	*ej	
low	*a			*ā	*ɔ̄			
					*ā			

b. *Early Old Franconian changes*

Contemporary evidence from before 700 is absent, except for a few names in Latin documents. The only texts which have been composed before that date are the Lex Salica and Pactus Legis Salicae. Even though the extant manuscripts of those texts date to the late eighth and the ninth centuries, we can use the vernacular glosses in the texts as indicative of the language of the Merovingian period (see Table 11). A few changes show up:

1. The metathesis of intervocalic \*pl > \*lp is shown by 1SG.PRES. *maltho* ‘I say’ (Quak in ONW s.v. *malthon*).
2. WGm. NOM.ACC. SG. \*-ewa had already yielded -eo, as shown by *theo* ‘servant, slave’ (Quak in ONW s.v. *thio*).

3. The endings *\*-az*, *\*-an* leave no certain traces in the Merovingian glosses, but the Runic evidence suggests that final unstressed /-a/ was still present in the fifth century. In Alemannic, at least, it was preserved until the sixth century (see above). By the end of the seventh century, it will have been lost in all of non-Frisian Continental West Germanic. Once final *-a* was lost, *\*u* split into /u/ and /o/.
4. Monophthongization of *\*ai* and *\*au* before *r*, *h*, *hw* and *w*, viz. in Lex Salica *chreo-* ‘corpse’ <*\*hraiwa-* (ONW s.v. *rēō*) and *seola-* ‘soul-’ <*\*saiwalō-* (ONW s.v. *siela*), and possibly also in the form *horogauo*, *horogaut*, if it represents an ACC.SG.M. *\*chorogan* = *hōrogan* ‘serf’ from WGM. *\*xaurigan-* (MoDu. *horige*, see Quak in OWN s.v. *\*hōrigo*). We can posit the changes *\*ai* > *\*ae* > */e:/* and *\*au* > *\*ao* > */ɔ:/*. The monophthongal stage was reached in Franconian around 700 (Braune & Reiffenstein 2004 § 43) judging by the evidence of personal names.

It may be useful to add the clearest evidence in the Lex Salica for the absence of certain phonological changes which are well known from the later stages of Old Dutch, but which must apparently be dated after 600:

5. The fricative *\*x* is well represented by the spelling *<ch>*, as in *changisto* ‘stallion’ (see Quak in OWN s.v. *hengist*). Whether it was indeed still pronounced as [x] by the sixth-century Franks, or was lenited to [h] but written as *<ch>* by the later scribes, remains uncertain.
6. There is as yet no *r*-metathesis before dentals, e.g. in *bructe* for *\*brustV* ‘breast’ (see Quak in ONW s.v. *\*idisbrust*).
7. The gloss *ortfocla* ‘tame bird’ (see Quak in ONW s.v. *\*ortfogal*) might hide a sixth-century form *\*ort-fokl*, with vocalic *-l* preserved in word-final position. Alternatively, it could be interpreted as a form preserving the NOM. ACC. SG. ending *-a* found in a few West Germanic Runic inscriptions, such as *lapela* ‘spoon’. It seems less likely that *-focla* was a spelling error for *\*-focal* by the Carolingian copyists of the Lex Salica.
8. The form *turnichal*, *tornechallis*, plausibly from *\*tuz-nixwal* ‘digging up a body’ (Quak in OWN s.v. *\*turnialin*), shows that the prefix *\*tuz-* still retained the *u*-vowel, as well as the final *-r* <*\*-z*.
9. There is no explicit evidence for *i*-mutation of short *\*a* to *\*ä* = */e/* (so-called primary *i*-mutation). All probable instances of words with a sequence liable to *i*-mutation of *\*a* show *<a>* (Quak 2008a). Very clear examples are *chaltia* ‘sow, pig’ (OHG *gelza* ‘piglet’, MDu. *gelte* ‘sterile pig’; see Quak in ONW s.v. *\*dregigelta*, *\*fokkigelta*, *\*nerigelta*, *\*rennigelta*, *\*swēnigelta*) and *changisto* ‘stallion’ (MoDu. *hengst*).
10. There also seems to be no *i*-mutation of *\*eu*. At least, the frequent words *leode* ‘wriegeld’ (<*\*leudi*, cf. Quak in ONW s.v. *liut*) and *leodinia* ‘fine for killing a woman’ (Quak in ONW s.v. *\*liudinna*) are never spelled with

<iu> or another spelling which would show fronting. It must be conceded, though, that the forms in *leod-* could represent a latinization in view of Middle Latin *leudis* ‘weregeld’.

11. The diphthongs \*ai and \*au had probably remained as such, except before r, h(w) and w. Evidence for \*ai includes \*and-haimi ‘abduction’ (Quak in ONW s.v. \*anthēmi), *geisofredo* ‘wound between the ribs’ (\*gaisa-, cf. Quak, ONW s.v. \*gēsōfrīt), and *cham-* ‘home’ (Quak in ONW s.v. \*hēm I); evidence for \*au includes *ortobaum*, *orthobano* ‘fruit tree’ (Quak in ONW s.v. \*ort-bōm). In *reipus* and *andreipus* ‘rope (money)’ (cf. Quak in ONW s.v. *rēp*), the original diphthong \*ai is preserved as <ei>, though in some passages, all manuscripts agree on <e>: *rephus*, *rephouano*. The same spelling is found in *chrenecruda* ‘loose earth(?)’ if this contains \*hraini- ‘pure’, as proposed by Quak, in ONW s.v. \*rēnkrūda. The conditioned split of \*au into /au/ and /ɔ:/, and of \*ai into /ei/ and /ɛ:/ in the central Dutch dialects, is dated between 700 and 800 by van Loon (2014: 118–24).
12. Pretonic *ga-* is still <ga-> if the sequence *gas ferit* in *Pactus Legis Salica*, ms. A2, represents \*ga-ferrit ‘removed’ (see Quak, ONW s.v. \*giferrit). There are several other glosses in <cha-> which are interpreted as having initial *ga-*.
13. There was no diphthongization of \*ō, or, in any case, it is not reflected in spellings: <o> in *atomeo* ‘I set free’ (<\*uz-tōmjan- to PGm. \*tōma- ‘empty, free’; cf. Quak in ONW s.v. \*ātōmen).  
There is conflicting evidence for two more changes:
14. The spelling of ‘five’ in the glosses is intriguing: we find *fit mihachunna*, *vueth chunna* and *fitme chunna* ‘five hundred’ (see Quak in ONW s.v. *fif* ‘five’). The variants *fit miha-* and *fitme* might represent \*fimf, whereas *vueth* could go back to \*uuifh representing /fi:f/.
15. WGm. \*ā is reflected as <e, i> in *ledo*, *lito* ‘half-free’ (OHG *lāz*, OFri. *lēt*; see Quak in ONW s.v. *lāt*), where we must allow for influence of the Latin correspondence *laetus*. The more certain cases have <a>, as in Lex Salica *chratis* ‘honeycomb’ (OHG *rāza*, Du. *raat* < PGm. \*xrētō- ‘honeycomb’), cf. Quak in ONW s.v. *rāta*.

Finally, for the sake of completeness I mention:

16. The High German consonant shift: the shift of West Germanic voiceless (preglottalized) stops to voiceless affricates and geminated fricatives, e.g., OHG *offan* ‘open’, *skif* ‘ship’, *ezzan* ‘to eat’, *hwaz* ‘what’, *mahhon* ‘to make’, *ih* ‘I’ as opposed to OS *opan*, *skip*, *etan*, *hwat*, *makon*, *ik* (see Braune & Reiffenstein 2004 § 83–90 for more details). In the traditional formulation, the High German consonant shift also involves the devoicing of voiced stops in Upper German, as in Old Bavarian *tohter* ‘daughter’, *kepan* ‘to

give' for *dohter, geban* in Old Middle Franconian; in our alternative view of West Germanic, these voiceless stops rather represent an archaism (see I, b, 3 above). Since the High German consonant shift defines the difference between Low and Middle Franconian, it is by definition absent from Low Franconian. Of the modern territories of the Netherlands and Belgium, only the southeastern corner has the shift of \**k* to /x/ in *ich* 'I', *mich* 'me', *dich* 'you' and *ouch* 'also'. Only a few Limburgian towns west of Aachen are affected by the Middle Franconian consonant shift in its entirety. Lexical diffusion has brought about the spread of some words with shifted consonantism into other Limburgian dialects, cf. Goossens 1968.

Table 11. The Early Old Franconian system around 700 CE

**Consonants:**

Labial		Dental		Velar	
<i>p</i>	<i>pp</i>	<i>t</i>	<i>tt</i>	<i>k</i>	<i>kk</i>
<i>f</i>	<i>ff</i>	<i>þ</i>	<i>þþ</i>	<i>x</i>	<i>xx</i>
<i>b</i>	<i>bb</i>	<i>d</i>	<i>dd</i>	<i>g</i>	<i>gg</i>
		<i>s</i>	<i>ss</i>		
<i>w</i>	<i>ww</i>	<i>j</i>	<i>jj</i>		
<i>m</i>	<i>mm</i>	<i>n</i>	<i>nn</i>		
		<i>r</i>	<i>rr</i>		
		<i>l</i>	<i>ll</i>		

**Stressed vowels:**

	Short		Long		Diphthongs	
high	* <i>i</i>	* <i>u</i>	* <i>ī</i>	* <i>ū</i>	* <i>iu</i>	
mid	* <i>e</i>	* <i>o</i>		* <i>ō</i>	* <i>ea</i>	* <i>eo</i>
low	* <i>a</i>		* <i>ā</i>		* <i>ai</i>	* <i>au</i>

**RP III. Late Proto-Frisian vs. Late Old Low Franconian (1000 CE)**

a. *Late Proto-Frisian changes*

For Late Proto-Frisian, we are first of all interested in the western dialects which would have been spoken along the Dutch coast. Some information can be gleaned from onomastic evidence (Gysseling 1960b, 1962, Quak 2003, 2012a, 2012b: 64–9), but most of the features which show that a name was of Frisian stock (Bremmer 2008: 287–8) arose in the period before 700, and hence cannot be used to define the period up to 1000. The Continental Late-Proto-Frisian system is given in Table 12.

1. Unrounding of front rounded vowels. According to Versloot (2001b: 768), we must reckon with two dialect groups at the time of unrounding, viz. Continental Frisian (whence Westerlauwers Frisian, Ems Frisian and Continental North Frisian arose) and Insular North Frisian. In the former group, unrounding of short and long \*ü yields a mid vowel <e>, whereas in Insular North Frisian, we must posit the resulting high vowels \*i and \*ī. The separate unroundings can be dated to the eighth century, not very long after the separation of what became Insular North Frisian (Gysseling 1962: 19, Buccini 1995: 41).
- \*u > \*ü > ContF \*e (merging with /e/ and \*ä), InsNF \*i  
 \*ü > \*ē > ContF \*ē (merging with \*ē from WGm. \*ea and \*æ), InsNF \*ī  
 \*ō > \*ō > \*ē (not always merging with /ē/ from other sources)
2. Allophonic voicing of intervocalic \*f, \*þ, \*s (e.g., OFri. *fethere* ‘feather’, CNFri. *fääder*, *fääär*, MoWFri. *fear*). In addition, voicing of word-initial \*þ- in frequent (unstressed?) function words, such as OEFri. *thenne* > *denne*, OWFri. *thanne* > *danne* ‘then’ (Bremmer 2009: 50).
3. Lenition of intervocalic \*b to \*v, e.g. *-liva*, *-leva* ‘to live’, *liāf* ‘dear’, *drīva* ‘to impel’.
4. Reduction of the unstressed vowel system to a triangular system with /i~e/, /u~o/ (the high vowels appear after a light stem or after a high vowel in the stem, the mid vowels elsewhere), and /a/ (Nielsen 2000a: 80–1).

Table 12. The Continental Late Proto-Frisian system

## Consonants:

Labial		Dental		Palatal		Velar	
p	p <small>p</small>	t	t <small>t</small>	c	c <small>c</small>	k	k <small>kk</small>
f/v	f <small>f</small>	b/ð	b <small>b</small>			x	x <small>xx</small>
b	b <small>b</small>	d	d <small>d</small>	j	j <small>j</small>	g	g <small>gg</small>
	s/z		ss				
w	w <small>w</small>			j		jj	
m	m <small>m</small>	n	n <small>n</small>				
		r	r <small>r</small>				
		l	l <small>ll</small>				

## Vowels:

	Short		Long		Diphthongs	
high	*i	*u	*ī	*ū	*iu(:)	*ia(:)
mid	*e	*o	*ē	*ō	*ej	
low	*a		*ā	*ɔ̄		*ā

b. *Old Franconian changes*

A number of Old Low Franconian texts can be dated to the period between 700 and 1000, either because their original was penned down in that period (the baptismal formulas), or because they were presumably composed in that period, even though the surviving manuscripts date from later centuries (as in the case of the Wachtendonck Psalter). Furthermore, we have personal names from places such as Ghent and Xanten, and toponyms in Latin documents originating from or describing several regions of the Low Countries. The Old Franconian system of ca. 1000 is given in Table 13. Some of the main changes observed are:

1. Lenition of intervocalic  $*x^{(w)}$  to ODu. /h/, which is subsequently lost between vowels: ODu. *jehan* ‘to say’, MDu. *giën*. Compare also ODu. *beuelen* ‘to command’, MoDu. *bevelen* (OS *bifelhan*, PGm. *\*felxanan*). It seems likely, however, that word-final -x was retained longer, as it survives into Middle and Modern Dutch as <-ch>, <-g> in a number of words, especially after vowels. The modern language usually spells <g> here, e.g. Dutch *hoog* ‘high’ (*\*xauxa-*), *zag* pret. ‘saw’ (*\*sax<sup>w</sup>*), *sloeg* ‘slew’ (*\*slōx*), *ruig* ‘rough’ (*\*rūxa-*).<sup>36</sup>
2. Loss of initial *h*- (Quak 2000). Before liquids, *n* and *w*, *h* is generally dropped in all of Dutch. Only some of the earliest toponyms retain *h* before liquids, in words attested in (copies of) sources from the eighth, ninth and tenth centuries, as do two glosses (*hlothu*, *hrot*). Among the scarce written traces of the fricative are the toponyms *Hrineshem* in Guelders (855 copy 10th c.), and *Hlithum* next to *Lidum* in North Holland (10th c.). The modern language has several homonyms due to the merger of *\*xR-* and *R-*: MoDu. *lid* ‘body part’ <*\*lipu-* vs. *oog-lid* ‘eye-lid’> <*\*xlida-*, MoDu. *rijm* ‘hoar-frost’ <*\*xrima-* vs. *rijm* ‘rhyme’ from French *rime*, MoDu. *(ver)welken* ‘to wither’ to *\*welka-* ‘humid’ vs. *welk* ‘which’ <*\*x<sup>w</sup>alika-*. Before a vowel, *h*-loss is attested in Flanders from the eleventh century onwards, as is the hypercorrect addition of *h*- to vowel-initial words.
3. *xs* > *ss*. The assimilation of *xs* to *ss* is typical of Dutch and Low German. It probably happened in the west of this continuum first. In the southeastern Dutch Wachtendonck Psalter of ca. 1000, we find *uuusso* ‘foxes’ (GEN.PL.) beside *uuahson* ‘to grow’, *uuihsil* ‘change’, *ohsson* ‘oxen’. The earlier date of

<sup>36</sup> The main exception with <-ch> is MoDu. *toch*, *doch* ‘yet, however’ <*\*paux*. A spelling doublet has led to semantic differentiation in the particles *nog* ‘still, yet’ versus *noch* ‘nor’, both from PGm. *\*nux*. After *r*, the velar fricative is preserved in the MDu. hapax *dworch* ‘transverse’ (Gouda, ca. 1340; cf. Verdam 1919: 245–6), cf. OS *thwerh*, as opposed to the assimilation in MDu. *dwerree* ‘cross-ditch’ (*\*dwerch* plus *reye* ‘ditch’), and dialectally also in MDu. *dorch*, MoDu. *durg* ‘through’, StDu. *door*.

the change in western dialects is shown by that fact that in Ghent, there is no trace left of \*x before s by the eleventh century (Tavernier-Vereecken 1968: 589). By 1200, ss has become general in Dutch.

4. Voicing of the word-initial and word-internal fricatives \*f, \*þ, \*s to [v], [ð], [z]: Du. *vader* ‘father’ < \*fader, over ‘over’ < \*ufar, zee ‘sea’ < \*saiwa-, lezen ‘to read’ < \*lisan, dat ‘that’ < \*þat, broeder < \*brōþar. Voicing can be dated to the tenth or eleventh century on the basis of written evidence, such as Old Ghent personal names (Tavernier-Vereecken 1968: 580f.), though it may have been present earlier in pronunciation. The voicing must post-date the lenition of intervocalic \*x. In spelling, voiceless f-, s-, and th- are retained in anlaut until Late Old Dutch, which may be due to the fact that voiceless allophones managed to survive word-initially in word sandhi, viz. after a preceding voiceless obstruent (van Loon 2014: 193).
5. Lenition of intervocalic -b- to -v- (MDu. *gheven* ‘give’) and of word-initial and word-internal -g- to -ɣ- (MDu. *goed* ‘good’, *ooghe* ‘eye’). The new /v/ merged with Early Old Franconian intervocalic \*f. In Flemish, the fricative character of /g/ is indirectly attested from the eleventh century by the spelling <ch> for a voiceless fricative in auslaut: *Isburch* ‘Is-burg’, *Thietwich* ‘Thiet-Wig’ (Tavernier-Vereecken 1968: 587).

Old Franconian \*g, both as a stop and as a fricative, must have had a palatal allophone next to i, e, and a velar allophone before a, o, u. The existence of the palatal allophone is proven for Dutch by the merger of /ɣ/- and /j/- before front vowels, as in *geden* ‘to weed’ < \*jetan, *gij* ‘you’ < \*jīz, *gest*, *gist* ‘yeast’ < \*jestā- (see § 9.4). Also, before dental consonants, WGm. \*eg and \*ag merged with ODU. ei (< WGm. \*ai), whereas \*ig merged with ODU. ī. This palatalization can roughly be dated to the tenth century: ei arose after 833 in southwestern Old Saxon (Tiefenbach 1984, 2002: 296), and is attested after ca. 950 in personal names from Ghent (e.g. *Eilbertus*, *Theinardus*).

6. Word-final devoicing. The devoicing must post-date the loss of postvocalic \*-z and the split from Anglo-Frisian. If one regards the West Germanic obstruent system as originally consisting of voiceless phonemes only (see above), then the word-final voiceless obstruents can also be interpreted as archaisms which escaped word-internal voicing.
7. Devoicing of fricatives in syllable coda before resonants. A number of lexemes with intervocalic voiced fricatives in Dutch (Schönfeld & van Loey 1970: 55) and Low German (Lasch 1914: 131f.) have allomorphs with a voiceless fricative before l, m and n. A similar devoicing of b (v) to f is found in Old High German, but on a smaller scale (Braune & Reiffenstein 2004 § 139 Anm. 5). In Dutch, the change involves the fricative pairs s/z, \*þ/\*þþ, f/v, and g/ch, compare MoDu. *bezem/bessem* ‘broom’ < \*besman, adem/

asem ‘breath’ < \**æþma-*, *gavel/gaffel* ‘fork’ < \**gablō-*, *even/effen* ‘even’ < \**ebna-*, *logenstraffen* ‘to belie’ < \**luginō-* but *loochenen* ‘to deny’ < \**laugjan*. Devoicing of *v*, *z*, *g* was productive before derivational suffixes in *l* or *n* in Late Old and Early Middle Dutch: *lieftijk* ‘lovely’ to the stem *lief*, *lieve-* ‘dear’, *schuifelen* ‘to shuffle’ to *schuiven* ‘to shove’, *begrafenis* ‘burial’ to *begraven* ‘to bury’ (de Vaan 2014a).

8. Raising of the first element of the diphthongs *\*ai* and *\*au* to mid vowels, yielding *ei* and *ou* in the course of the ninth century (van Loon 2014: 118–22).
9. Monophthongization of *\*iu* to /y:/: Van Loon (2014: 125) dates this change to around 900 for inland Dutch. The new vowel merges with the result of secondary *i*-mutation of *\*ū*.
10. Secondary *i*-mutation of low and back vowels (Goossens 1981, 1989):

*\*ū, \*ō* (or *\*uo*), *\*au, \*ai, \*ɔ̄, \*ā, \*a, \*o, \*u*

yield

*\*ȳ, \*ȫ* (or *\*iū*), *\*öü, \*äi, \*ə̄, \*ā̄, \*ā, \*ö, \*ü*

before *\*i, \*ī, \*j*

The loss of postconsonantal *\*j* as well as the reduction of unstressed vowels to schwa led to phonologization of the *i*-mutated vowels (Quak 1990b). Of these, *\*ȳ* merged with the product of earlier *\*iu* whereas *\*ā̄* merged with earlier *\*e* in part of the dialects. The vowels *\*ū, \*ō, \*ȫ, \*ə̄, \*ə̄̄, \*ā̄* and the diphthong *\*öü* were new to the system.

11. Reduction of *\*eo* via *\*io* (attested as <*io*> in spelling) to /iə/, spelled as <*ie*>. This diphthong merges with the result /iə/, spelled <*ie*>, of *\*ea*. In dialects, MDu. /iə/ in hiatus and word-finally often merged with /i:/, which explains a number of words in *ij* of the standard language: *bij* ‘bee’ (MDu. *bie*, OHG *bīa* < \**bi(j)* īō-), *dij* ‘thigh’ (ODu. *thio*, MDu. *die*, OE *pēoh* < WGm. \**þeuxa-*), *lij* ‘lee(side)’ (MDu. *lie*, OS *hleo*, OFr. *hlī* < \**xlewa-*; cognate with MoDu. *luw* ‘protected’ < \**xlewa-*), *betijen* ‘to move on’ (MDu. *tien*, OHG *ziohan* < \**teuxan-*).
12. Diphthongization of *\*ō* to *\*uo* <*uo*> in Brabant and southern Guelders, which may by the eleventh century have become /uə/, at least in part of the southern and eastern dialects of the Low Countries. Possibly, the diphthongization responded to systemic pressure caused by the earlier rise of /ɔ:/ and /e:/ from *\*au* and *\*ai*, and by the presence of the other opening diphthongs *\*ea, \*eo* which became *ia, io*.

In Middle and Modern Dutch there are several areas which preserve a mid monophthong /o(:)/, such as East Limburg and parts of the north-east. In addition, some relic forms with /o:/ are found in western dialects. The same geographic dichotomy holds between central dialects in which *\*io* and *\*ea* became /iə/ > /i:/, spelled *ie*, and peripheral dialects in which

/e:/ was retained; *mutatis mutandis* this is also true for the front rounded counterpart of WGm. \*ō. This situation has been explained in two different ways (see van Loon 2014: 155). One solution is to argue that in Flanders, Holland, Utrecht, the northeastern dialects, and East Limburg, \*ō did not diphthongize to /uo/, or not as early as in Brabant. Alternatively, the eastern dialects did diphthongize \*ō to an opening diphthong such as /ōa/, but then monophthongized it to /ō/ again.

13. Loss of *w* between a consonant and stressed \*uo; that is, -Cwuo- > -Cuо-. This change is found in OHG *huosto* ‘coughing’ < \*hwuostō < \*hwōstō, and in *suozi* from earlier *swuozi* ‘sweet’ (Braune & Reiffenstein 2004 § 107), but not in Old Saxon or Old English, where ō remained a monophthong (OS *swōti*, OE *hwōsan* ‘to cough’). In Frisian, OFri. *sōn(e)* ‘appeasement’ and *sēna* ‘to appease’ have no *w* anymore, and a preform \*hōsta- ‘cough’ is suggested by WFri. *hoast*, InsNFri. *hoost* ‘a cough’. In Dutch, variants without and with *w* can be found for a number of words, e.g., for *zwoel*, *zoel* ‘hot, humid’ (\*swōla-; both variants occur in the standard language), *zoenen* ‘to appease; kiss’ (\*swōnjan-), *zoet* ‘sweet’, *hoesten* ‘to cough’, *hoe* ‘how’ (\*hwō).
14. Loss of postconsonantal *j*. Quak 2004 dates the loss of *j* in Old Dutch to the (early) ninth century, based in particular on names from Ghent.

Table 13. The Old Franconian system ca. 1000

**Consonants:**

Labial		Dental		Velar		Glottal
<i>p</i>	<i>pp</i>	<i>t</i>	<i>tt</i>	<i>k</i>	<i>kk</i>	
<i>f</i>	<i>ff</i>	<i>þ</i>	<i>þþ</i>	<i>x</i>	<i>xx</i>	<i>h</i>
<i>b</i>	<i>bb</i>	<i>d</i>	<i>dd</i>	<i>g</i>	<i>gg</i>	
<i>v</i>		<i>ð</i>		<i>y</i>		
		<i>s</i>	<i>ss</i>			
<i>w</i>	<i>ww</i>	<i>j</i>	<i>jj</i>			
<i>m</i>	<i>mm</i>	<i>n</i>	<i>nn</i>			
		<i>r</i>	<i>rr</i>			
		<i>l</i>	<i>ll</i>			

**Stressed vowels:**

Short			Long			Diphthongs		
high	*i	*ü	*u	*ī	*ŷ	*ū		
mid	*e	*ö	*o				*ɛ	*œ
				*iɔ	*iœ	*uɔ		*ɔ̄
low	*ä	*a		*ā	*ā		*ei	*öü
								*ou

## RP IV. Old West Frisian vs. Early Middle Dutch (ca. 1250 CE)

- a. *Early Old Frisian changes* (Siebs 1901, Hoekstra 2001, Quak 2003, 2012b):
1. *r*-metathesis in *r* plus short vowel before dentals, from \*-rV- to -Vr-, as in OFri. *ferst*, *first* ‘period’, *fersk* ‘fresh’. It is dated to the eleventh century by van Loon (2003: 151), cf. the toponym *Burnuurð* (11th c., Werden), which contains \**brunna(n)*-.
  2. Raising of *e* > *i* before *rC* and *lC*, as in the toponym *Berghem* (1st half 11th c.) > *Birghem* (end 11th c., Groningen).
  3. The diphthongs /iu/, /iu:/ and /ia:/ develop consonantal /j/, as shown by subsequent developments. They can henceforth be interpreted as biphonemic sequences of /j/ plus \**u*, \**û*, \**â*.
  4. The occasional absorption of *j* in *ja*, *ju* after liquids: OFri. *briast* > *brast* ‘breast’, *flucht/fliucht* ‘he flees’ (Bremmer 2009: 42–3). This can be dated after the eleventh century, cf. unchanged *ia* in *Ottarfliaton*, *Oterfletun* (10th and 11th c., Werden), *Marsflata* (10th–11th c., Werden), *Hriadi* (10th c.), *Hriade* (11th–12th c.). Note also the absence of metathesis in Old East Frisian *briast*, *brast*, which means that the rise of *brast* post-dates *r*-metathesis.
  5. Loss of \**w* between two *i*’s: OFri. *nī* ‘new’ < \**niwja-*, *knī*, OWFRI. *knē* ‘knee’ < \**kniwa-*.
  6. The palatal stops probably remain for a long time. The change from palatal stops or affricates to dental affricates can be dated after *r*-metathesis before dentals in the eleventh century (see nr. 1 above), as shown by OFri. *brits* ‘bridge’ < \**bruggjō*, *bretze* ‘breach’ < \**bruki*, *thretza* ‘press’ < \**þrukjan* (van Loon 2003: 145).

Table 14. The Early Old West Frisian system

## Consonants:

Labial		Dental		Alveolar		Velar	
<i>p</i>	<i>pp</i>	<i>t</i>	<i>tt</i>	<i>ts</i>	<i>tts</i>	<i>k</i>	<i>kk</i>
<i>f</i>	<i>ff</i>	<i>p</i>	<i>pb</i>	<i>s</i>	<i>ss</i>	<i>x</i>	<i>xx</i>
<i>b</i>	<i>bb</i>	<i>d</i>	<i>dd</i>	<i>dz</i>	<i>ddz</i>	<i>g</i>	<i>gg</i>
<i>v</i>				<i>z</i>			
<i>w</i>	<i>ww</i>			<i>j</i>	<i>jj</i>		
<i>m</i>	<i>mm</i>	<i>n</i>	<i>nn</i>				
		<i>r</i>	<i>rr</i>				
		<i>l</i>	<i>ll</i>				

Table 14. (continued)

Vowels:

	Short		Long		Diphthongs
high	<i>i</i>	<i>u</i>	<i>ī</i>	<i>ū</i>	
mid	<i>ɛ</i>	<i>ɔ</i>	<i>ē</i>	<i>ō</i>	<i>ej</i>
low		<i>a</i>	<i>ē</i>	<i>ɔ</i>	<i>au</i>
			<i>ā</i>		<i>ou</i>

This yields the Early Old West Frisian system of Table 14, before the workings of open syllable lengthening (Hoekstra 2001: 722, Versloot 2001b), and immediately before the raising and fronting of /ā/ which happened in Old West Frisian. The latter was not shared by the dialects of Hindeloopen and Schiermonnikoog, nor, probably, by the dialects spoken in North Holland (de Vaan 2011a: 311).

#### b. Late Old Dutch and Early Middle Dutch changes

The developments of this period are more diversified as regards their dialectal spread. The following changes can be seen in all dialects:

1. Occlusion of the voiced dental fricative [ð] to *d* in anlaut and inlaut in the twelfth century: *thu* > *du* ‘thou’, ODu. *fetheron* > MDu. *federen* ‘feathers’ (van Loon 2014: 233).
2. In the early twelfth century, \**pþ* regularly yields voiceless *ss*, which was spelled <*s*> after long vowels and <*ss*> after short ones (de Vaan 2014a). It merges with geminate /s:/ from WGM. \**ss* and \**xs*. The evidence includes *bessen* ‘to dab a wound’ (< \**babjan*), *smisse* ‘smithy’ (\**smibjō-*), and *klis* ‘tangle, burdock’ (\**klippan*-). The rise of a sibilant reflex may be due to the voicing and occlusion of single \**p* to *d*, after which \**pþ* remained isolated as a dental fricative.

In the sequence \**pm*, \**p* remained voiceless and merged with /s(:)/ in Late Old Dutch. Paradigmatic alternations explain the existence of variants with *dem* versus *sm*: central and eastern *adem* versus western Dutch *asem* ‘breath’ (NOM.ACC. \**æbam*, OBL. \**æpm-*), Dutch *vadem* ‘fathom’ (< \**fabma-*) versus *vessemēn* ‘to fathom’ (< \**fabmjan-*); for details, see de Vaan 2014a.

3. Syncope of short vowels in open, word-internal syllable. This takes place at various times between the common West Germanic period and Modern Dutch. Of the different processes described below, the first two date from a period when unstressed vowels still had distinct qualities, whereas the third and fourth took place after the reduction of unstressed (short) vowels to schwa. Large-scale syncope of schwa takes off somewhere during the twelfth century, but the exact chronology, speed and conditions depended on the total number of syllables per word, on its rhythmic structure, on its morphology, and on the dialect. Furthermore, intra- and extraparadigmatic

analogy played a major role in stimulating syncope or, conversely, restoring the elided vowel. Whether the phonetics of the intervening consonants also mattered, is unknown. The issue has not been researched exhaustively.

- 3.1 There was an early syncope of short vowels after a heavy syllable and after disyllabic first members already in West Germanic compound nouns, as shown by names such as OHG *Adalberth* (\**abala-berxta-*), *Eburnand* (\**ebura-nanpa-*), *Mahthild* (\**maxti-hilpi-*), etc.; OHG *kuonheit* ‘bravery’ (\**kōni-haipi-*), *miltherzi* ‘merciful’ (\**meldja-hertja-*). If the first syllable was light, the second vowel was usually retained: OHG *Kunigund* (\**kunja-*), *Sibigelt* (\**sibjō-*), *Fridurih* (\**fridu-*), *Aragēr* (\**ara(n)-gair-*); *tagamuos* ‘midday meal’ (\**daga-mōsa-*), *heriberga* (\**harja-bergō-*). There is variation in names with a heavy first member: *Ruodigēr* beside *Ruodgēr*, *Karleman* beside *Karlman*, etc. (Braune & Reiffenstein 2004 § 62 Anm.4).
- 3.2 Syncope of internal vowels in simplexes only regularly affects the suffix vowel *i* of the weak preterite in Old High German after a heavy syllable: *hōrta* ‘heard’ (\**haurida*) but *nerita* ‘saved’ (\**narida*). Here it is possible that syncope took place on the model of verbs which lacked a suffix vowel all along, such as \**sōxta* ‘sought’ and \**pāxta* ‘thought’ (Ringe 2006: 252; pace van Loon 2014: 85).
- 3.3 In Early Middle Dutch trisyllabic words of the structure  $CV_1CeCV_2(C)$ , in which  $V_2$  is a full vowel, that is, before a secondarily stressed suffix such as *-kijn* (diminutives), in original compounds, such as in *-dom*, *-schap*, and in synchronic compounds of all kinds, syncope of schwa probably regularly applied. Of course, a polysyllabic stem could be restored on many occasions. For instance, beside ODu. *haribergi* (loc., ca. 1000), later *hereberga* (ca. 1100), Early Middle Dutch usually has *herberghe* ‘inn’, but *hereberghe* is also sporadically found. Similarly Early MDu. *bodescap* becomes *boedscap* ‘errand, message’. Note that the second syllable of *here-* was apparently syncopated before open syllable lengthening took place, as we have no evidence for \**heerberghe*, whereas the reverse chronology holds for *boedschap*. In the latter case, one might invoke analogy with the simplex *bode* ‘messenger’ which acquired a lengthened vowel throughout.
- 3.4 In Late Old Dutch words of the structure  $CVCeCe(C)$ , with *e* representing schwa, either the second or the third syllable could be syncopated. Most likely, syncope of the first schwa was the norm, whereas retention of the first schwa and syncope of the second one could result from analogical restoration of the first schwa if it belonged to

the stem (van Loon 2014: 182–3). In the thirteenth century, syncope can be observed, among other forms, in:

- isolated nouns such as ODu. *bilithe* ‘image’ > *bilethe* > Early MDu. *beelde* (Fle.), *belde* (Brab.), *bilde* (Lim.) > MoDu. *beeld*;
- comparatives in *-ere* and superlatives in *-est*: *scoonre* ‘more beautiful’, *coenste* ‘most valiant’ (MoDu. *-er* and *-st*);
- feminine abstract nouns in \**-ipō* > MDu. *-ede* > *-de/-te*: MDu. *lievede* > MoDu. *liefde*, MDu. *scamede* > *scaemte* = MoDu. *schaamte* ‘shame’;
- adjectives in *-isch* > *-sch* > MoDu. *-s*: MDu. *juedesche* > *Joodsche* > *Joods* ‘Jewish’;
- the weak preterite: Early MDu. *makede* > *maecte*, MoDu. *maakte* ‘made’;
- words ending in Early MDu. *-eRe(C)*: *lettere* > *lettre* ‘letter’ (next to apocopated *letter* as in Standard Dutch), *segele(n)* > *segle(n)*, in oblique cases of *segel* ‘seal’, MoDu. *zegel* (syncope particularly in western Early Middle Dutch); *brodre* GEN.PL. of *broeder* ‘brother’; etc.

In disyllabic words of the structure CVCeC, unstressed *e* can be syncopated especially if the syllable *-eC* was not a recognizable morpheme. Thus ODu. *mānoθ* ‘month’ > *māneth* > Early MDu. *maent*, DAT.PL. *maenden*, MoDu. *maand*; ODu. *thienest* > MDu. *dienst* ‘service’; ODu. \**twālif* > Early MDu. *twelef*, *twelve* > MoDu. *twaalf* ‘twelve’; ODu. *hovid* > Early MDu. *hovet*, *hoeft* > MoDu. *hoofd*; ODu. *nachot* > Early MDu. *naket* > *naect* > MoDu. *naakt* ‘naked’; ODu. \**sagit* > Early MDu. *seghet* ‘says’ but *seidi* ‘says he’ < \**seget-hī*.

Yet the alternation found in some of these words (*seghet* but *seidi*, *naket* singular but *naecte* plural) shows that we are really dealing with syncope in trisyllabic forms: \**nākede* > *nākte*, *segedi* > \**segdi* > *seidi*. In some paradigms, the loss of the second syllable was generalized to the disyllabic members of the paradigm. This is confirmed by the existence of words which retain posttonic schwa both in the disyllabic forms and in trisyllabic ones: ODu. *havek* > MDu. *havek* ‘hawk’, GEN. *haveks*, ACC.PL. *haveke*. The medial syllable of *haveke* must be due to analogical restoration.

- 3.5 Variation in the number of syllables and in the syllable boundaries led to differences in the application of word-internal syncope within paradigms, and hence to paradigmatic alternation (Marynissen 1995, van Loon 1996 *passim*). For instance, the word *kegel* ‘cone, skittle’ has a genitive *kegeles* which could undergo syncope to \**kegles*, which ultimately led to *keiles*. Both variants were lexified in Dutch as different

words, *kegel* ‘cone’ and *keilen* ‘to fling’. Since word-final *-e* was subject to apocope around 1300, with the exact chronology differing per region, the order of apocope and syncope determined the outcome. For instance, a dative *segele* of *segel* ‘seal, stamp’ could be syncopated to *segle* (which apparently happened more often in western dialects, see Marynissen 1995: 100), it could be apocopated to *seghel*, or it could remain trisyllabic as *seghele*.

4. Metathesis of *rV* to *Vr* before the dental consonants *t*, *d*, *s*, *n* if *V* was a short vowel. Examples are MDu. *sport* (G. *Sprosse*) ‘rung’, *berd* (*Brett*) ‘board’, *vorsch* (*Frosch*) ‘frog’, *borst* (*Brust*) ‘breast’, *ors* (*Ross*) ‘horse’, *borne* (*Brunnen*) ‘well, bourne’. Goossens 1998 shows that the number of lexemes affected by this particular *r*-metathesis in modern dialects decreases as one goes from west (Flanders) via Brabant and Limburg to east (Ripuanian, Moselle Franconian). Also, whereas the metathesis is restricted to original *rV* in closed syllables in most dialects, Flemish has a few cases of metathesis in open syllables: *terden* ‘to tread’, *verde* ‘peace’ (Du. *vrede*). Such forms show that the metathesis predates open syllable lengthening. Van Loon (2003) dates the metathesis between 1050 and 1150, the oldest attestation possibly being the toponym *Firsnera* (West Flanders) for earlier *Fresnere*, now ‘Varsenare’.

Whereas Old Dutch short vowels before *r* plus a voiced dental are nearly always lengthened in Middle and Modern Dutch, e.g., MDu. *eerde* ‘earth’, *doern* ‘thorn’ (van Loon 2014: 225–7, de Vaan 2011b), the vowels of metathesized sequences usually remain short (see the examples above). One could postulate that phonetic lengthening of \**VrD* had taken place before 1050 and thus predated the rise of metathesized sequences. Alternatively, with van Loon (2014: 227), one might assume that *r*-metathesis was followed by lowering or centralization of the vowels in question, which created new sequences of the type *VrD* which acted as a push factor for the lengthening of the vowel in the old *VrD*-sequences.

5. Metathesis of *Vr* to *rV* before *xt*. In Old Dutch, this metathesis is absent from the available evidence, with the exception of toponyms containing personal names in *-berht* < \**Berxta-* in the twelfth century, e.g. *UUoutrechtengem* (1122) < \**Waldberxtinga-haim*. In Early Middle Dutch, the metathesis is present in most dialects except Limburgian: MDu. *vrucht* ‘fear’, *vruchten* ‘to fear’ (< \**furxti-*), (-) *wracht* ‘made’ (pret. and ptc. to *werken*), and personal names in *brecht* beside *bert*.
6. *ft* > *xt*. Standard Dutch shares with Low and Middle German the change of *ft* to /*xt*/. Whereas *cht* first appears in Middle Franconian in the eighth century and in Old Saxon in the tenth, the first certain attestations in Dutch

date from the twelfth century: *Lichtervelde* < \**luftar-feld-* (1127), *achtinghe* ‘confiscation’ < \**haft-* (Ghent, 1176–1200). This geographic distribution suggests that *xt* spread from central Germany to the north and reached Dutch relatively late. Holland preserved *ft* in the thirteenth century, and traditional dialects of Holland in the twentieth century still did so.

7. Vocalization of \**al*, \**ol* and \**ul* to *ou* before *t* and *d*. The vocalization is preceded by the three vowels merging in *o*, which can be dated to the tenth century in Flanders. The *l*-vocalization itself is attested after 1050 in Flanders, and after 1100 in Holland (Schönenfeld & van Loey 1970: 72). A number of southeastern dialects preserve *l*, whereas some others have vocalized *l* but preserve distinct reflexes of \**al* and \**ol*. The northeastern dialects of Dutch have not proceeded beyond the merger in *ol*; see the map in Goossens 2008: 93. Sporadically, *l* is palatalized to *j*, e.g. Early MDu. (*Ar*)*noid* ‘Arnout’ in Zealand, and once *gewoyt* for *ghewout* ‘power’. The vowel /i:/ in the next syllable is the likely cause of the vocalization of \**ol* to *oi* in the Middle Dutch names *Boydin*, *Boidi(j)n* as opposed to *Bouden* ‘Baldwin’ and *Woytin* versus *Walter*; see Mooijaart 1992: 154.
8. Fronting of ODu. /u:/ to /y:/, MoDu. <*uu*>, in Flanders in the twelfth century, and, before the end of the thirteenth century, also in West Brabant and Holland (see § 16.1). The fronting may have been caused by the rise of the diphthong /uo/ > /uə/, according to van Loon (2014: 217–8). The new front rounded vowel merged with /y:/ from \**iu* in Brabant, but represented a new phoneme /y:/ in coastal Dutch.
9. Lowering of ODu. tense and short /i/, /y/, /u/ in western and central Dutch to the Early Middle Dutch lax vowels /ɪ/, /ʌ/, /ʊ/, compare MoDu. *vis*, *put*, *vos* with MoHG *Fisch*, *Pfütze*, *Fuchs*. The lowering of \**i* caused some confusion with \**e* > /e/, which is seen by the large number of words in \**i* reflected with modern /ɛ/ and by the words in \**e* that now have /ɪ/ (van Loon 2014: 204). The lowering of \**u* probably caused the merger with \**o* in a large number of dialects, though it is uncertain whether this originally affected all of Dutch (see § 15.1.3).
10. Lengthening of short vowels in open syllable, ca. twelfth century on the basis of place-names (Quak 1995, van Loon 2014: 210). In the east, the short vowels \**i*, \**ü*, \**u*, \**e*, \**o*, \**ä*, \**a* yielded the corresponding long vowels. Whereas in western Dutch the lengthened products of the three front vowels \**i*, \**e*, \**ä* and the back vowels \**u* and \**o* merged in /e:/ and /o:/, these five new long vowels have remained distinct from each other in many eastern dialects, because the short high vowels had not been lowered to lax vowels as in western Dutch. In western Dutch, open syllable lengthening created a new phoneme /e:/ from WGm. \**i*, \**e*, \**ä* (e.g., WGm. \**himil-*, \**geban-*,

\**skapin-* > MDu. *hēmel*, *gēven*, *schēpen*), a new /o:/ from \**u*, \**o* (e.g. WGm. \**puruh-*, \**loban-* > MDu. *dōre*, *lōven*), and a new phoneme /ø:/ from \**y*. The new /a:/ from \**a* in open syllable merged with the product of \**æ* in most of western Dutch, except North Holland, but not in many eastern dialects (for instance, WGm. \**naman-* ‘name’, \**mānan-* ‘moon’ yield MDu. *nāme*, *māne* > MoDu. *maan*, *naam*, but Limburgian /na:m/ vs. /mɔ:n/).

11. Shortening of long vowels and diphthongs before consonant clusters. This occurred up to a certain degree in forms of the standard language (mainly in isolated lexemes) but the phenomenon was and is much more regular in many dialects. A West Germanic long vowel or diphthong has yielded a Middle Dutch short vowel in the following categories: (1) Before *cht*: MDu. *brachte* ‘brought’ (OS *brāhta*), MDu. *dachte* ‘thought’ (OS *thāhta*), MDu. *sochte* ‘sought’ (OS *sōhta*), MDu. *verkochte* ‘sold’ (\**kōfta*), ODU. *lioht* > \**liht* > MDu. *licht* ‘light’, MDu. *zachte* ‘soft’ (OS *sāfto*), MoDu. *ochtend* ‘morning’ (OS *ūhta*); (2) Before *nT*: MDu. *twintich* ‘twenty’ (OS *twēntig*), ODU. *fri-und* > MDu. *vrint*, *vrunt* (but MoDu. *vriend*), ODU. *stuont* > MDu. *stont*, MoDu. *stond* ‘stood’, ODU. *gieng* > MDu. *ginc* > MoDu. *ging* ‘went’; (3) Before geminates: ODU. *feitit* > MDu. *vet* ‘fat’ (WGm. \**faitida-*), ODU. *Bruocsella* ‘Brussels’ (< \**brōk-sali-*) > Early MDu. *brussele* beside *bruesele*, *brusele*.
12. Degemination. There is some confusion over the date of degemination. Whereas Schönfeld & van Loey (1970: 58) consider a date in or after the tenth century, van Bree (1987: 155) holds that geminate consonants must still have been present in Early Middle Dutch, and van Loon (2014: 212) also dates their simplification to the thirteenth century. Clearly, degemination must post-date the rise of \**xs* > *ss* and \**pp* > *s(s)*, which takes us into the early twelfth century. Degemination also post-dates lengthening in open syllables (or, at the very least, it must have been contemporary with the lengthening), since vowels before geminates remain short. It is difficult to decide on the basis of graphic evidence when degemination first started in Dutch, but a rough date in the thirteenth century seems plausible. Through degemination of /g:/, the phoneme /g/ was reintroduced into the language (e.g. in Early MDu. *secghen* ‘to say’), though this, too, soon changed into /ɣ/ in western dialects.
13. Resonant assimilations in intervocalic position: (1) *mb* > *mm*: ODU. *heimer* (ca. 1170), Early MDu. *eemer*, MoDu. *emmer* ‘bucket’ < \**ain-bar-*; ODU. *umbe*, EMDu. *omme* ‘around, about’, *dom(p)*, -*me* ‘dumb’, *lam(p)*, -*me* ‘lamb’, *Lambrech/Lammerech* ‘Lambert’, *tombe/tomme* ‘tomb’. (2) *ng* > *ŋ*: *vinger* > MoDu. /vɪŋər/; *koning* ‘king’ with /-ɪŋ/ from the oblique case forms, but /k/ in the surname *De Koninck* and the adjective *koninklijk* ‘royal’. (3) *nl* >

- ll: ellef, eleven* ‘eleven’ < \**ainlif(an)*, *spille* ‘spindle’ < \**spenn(i)-lō-*, *Linlo* (1157) > *Lille* (1181) ‘Lille’ (prov. Antwerp); Early MDu. *manlic*, *mallic*, *mallec* ‘each’ < \**man-ika-*; probably also in *elk* ‘each’, MDu. also *ellic* (MLG *elk*, *ellik*; OE *aelk*) if from \**aina-ika-*, although the stage \*-nl- is not attested in any document. There is little evidence for these changes before 1200 but their dialectal appearance in the thirteenth century suggests that they did develop somewhat earlier. (4) other resonant assimilations: *pm* > *m* in Early MDu. *coepman* > *coeman* ‘merchant’ (MoDu. *koopman*), *ampman* > *amman* ‘official’, *tn* > *n* in *vontnesse* > *vonnesse* ‘judgement’ (MoDu. *vonijs*), *dn* > *n* in *woensdag* ‘Wednesday’ < \**Wödensdag*, *dl* > *ll* in *Zellik* (974 *Sethleca*, 1108 *Selleca*), *Qualburg* (1050–1100 *Quadalburg*, 1143 *Qualburg*), *dr* > *r* in *Adriaen* > *Ariaen*, *laerse* ‘boot’ (1240), MoDu. *laars* < \**leder-hose*.
14. The loss of intervocalic *d*, *g*, *v*. Loss of *d* is generally dated to the late thirteenth and fourteenth century (van Loon 2014: 245–6), and seems to have spread from west to east. Van Loey 1976: 113 assumes *d*-syncope in Flanders from the twelfth century, in Brabant, from the thirteenth, and in Limburg, from the fourteenth: *zilinghe* beside *sidelinghe* (West Flanders, late thirteenth century) ‘small stream, dike’, *alsoengher* for *also-denigher* ‘suchlike’ (Maaseik, Limburg, 1343).

Syncope of intervocalic *v* can sporadically be found in Middle Dutch, e.g. in *heet* ‘has’ (< *hevet*), *hoot* ‘head’ (MoDu. *hoofd*) < *hovet*, two forms which survive as such in dialects, and in toponyms, such as *Haastrecht* (< *Havekes-dreht*, South Holland), *ter zen* ‘by the testimony of seven (witnesses)’ (from \**zeven* ‘seven’; North Holland, 16th c.), *Urmond* (< \**Euver-mont* ‘Over-mount’, Limburg). In Standard Dutch, *v*-syncope is found in the words *proost* ‘dean’ < MDu. *provest* < Old French *provost* ‘inspector’, *heus* ‘real’ < *heuvesch* ‘courteous’, and *oozie* ‘overhanging part of a sloping roof, eaves’ < MDu. \**ovese* (OHG *obasa*, Goth. *ubizwa*).

Examples of intervocalic *g*-loss are MDu. *lede* ‘lay’ < *legede*, *geseet* ‘said’ < *geseget*, *swijt* ‘is silent’ < *swiget*. Words which survive in Modern Dutch are *altoos* ‘always’ from \**al-toges* (*altos* already in 1200, Limburg), and *verdedigen* ‘to defend’ from Early MDu. *ver-dege-dingen* ‘to claim in court’.

Loss has proceeded much further with *d* than with *v* and *g*, possibly for structural reasons (van Loon 2014: 248): after open syllable lengthening, short vowels plus geminate obstruent correlated regularly with long vowels plus single obstruents. But whereas *ff/v*, *ch/g* and *ss/z* formed fixed pairs of geminate versus single fricatives, single *d* (or its predecessor *ð*) was lacking a geminate counterpart, since geminate \**pp* had become ODu. *ss* around 1100.

15. Dissimilatory loss of the velar nasal in /ŋg/ > /g/ when preceded by another nasal in the same word: *coninghinne* > *conighinne* ‘queen’, *maninghe* > *manighe* ‘admonition’, *penninghe* > *peneghe* ‘penny’ (inflected forms), *honech* beside *honing* (here, the nasal is absent already in the Wachtendonck Psalter *honog*), *woninghe* > *wonighe* ‘dwelling’, etc.

This yields the phonological system of Table 15 in the southeastern dialects. I furthermore assume for Flanders the raising of /e:/ (WGm. \*eo, \*ea) to /i:/ (whence MoFle. /i:/) and of ODu. /ɛ:/ to /eə/ (as still in West Flemish; the vowel did not merge with the product of open syllable lengthening of \*e). Also, similar changes applied to the back vowels. Table 16 provides the long-vowel system for the Flemish dialects and those of Brabant around ca. 1300, after the application of open syllable lengthening.

Table 15. The Early Middle Dutch system (southeastern dialects)

**Consonants:**

Labial		Dental		Velar		Glottal	
p	b	t	d	k	g		
f	v	s	z	x	ꝝ	h	
w		j					
m		n					
		r					
		l					

**Vowels:**

	Short		Long		Diphthongs		
high	i	ü	u	ī	ŷ	ū	
mid	e	ö	o	ē	ō	ō	iø
			ɛ	œ	ɔ		iiø
low	æ	a		ā	ā	ei	öü
						ou	

Table 16. The Early Middle Dutch long vowels and diphthongs (Flanders and Brabant)

Flanders (trad.)		Brabant		
/i:/	/y:/	(/u:/)	/i:/	/y:/
/iø/		/uø/	/iø/	/yø/
/e:/	/ø:/	/o:/	/e:/	/ø:/
/eə/		/oə/	/e:/	/ɔ:/
	/a:/			/æ:/
/ɛi/	/au/	/ou/	/ɛi/	/äü/
				/au/
				/ou/

## Palatalization of velars in Old and Middle Dutch

West Germanic \**k* and \**g* have been preserved as velar obstruents in Modern Dutch and in most of Old and Middle Dutch. Usually, we find a voiceless stop [k] for \**k*. The reflex of \**g* can have different phonetic realizations in modern dialects: in the west, it is mostly a voiceless velar or uvular, [χ] or [χ̥], whereas in the central south and in the southeast it is pronounced as a voiced palatal [j], but as voiceless [ç] in word-final position.

In several sets of Dutch words, in particular in the coastal dialects but not only there, \**k* and \**g* display or seem to display palatal or sibilant reflexes, such as *j*, *tj*, or *s*. Some scholars have implied that all or many of these palatalizations of \**k* and \**g* are interconnected. For instance, Schönfeld & van Loey 1970: xxxiv discuss under the header of “Ingvaeronse bestanddelen van en ingvaeronismen in het Nederlands”<sup>37</sup> the shift of *k* to *tj* (in diminutives and in some place names) or to *s* (in *smetsen*, *ceen*, *Butsegem*), the alleged shift of *ng* to *nz* (see § 9.5), and the shift of *g* to *j* in various contexts.

Some scholars cast the net even more widely, suggesting that the palatalizations of velars in Dutch are manifestations of a more general West Germanic phenomenon. Such is the take of Krogh 1996: 203–4 and van der Hoek 2010b: 88–100, 203–6. As is well known, West Germanic \**k(k)* and \**g(g)* regularly became dental affricates or fricatives and palatal glides in Old English and Old Frisian in the neighbourhood of front vowels or *j* (for details of the changes, see Campbell 1959: 174f. and Bremmer 2009: 23–35). Following Liberman 2007, van der Hoek 2010a, b explicitly regards the English and Frisian palatalizations as the outcome of palatal phonemes which were present in West Germanic. Dutch would have generalized the unpalatalized phonemes to a large degree, with the exception of the occasional palatalized reflexes of *k* and *g*.

Common to all previous discussions is their eclectic treatment of the available evidence. The following subsections aim to discuss the relevant topics in an exhaustive way: 1. Palatalization in clusters of dental plus velar obstruent; 2. Palatalization of word-internal \**g*; 3. Palatalization in the prefix \**ga-*; 4. Initial *j- > g-* before front vowels; 5. Loanwords and other irrelevant evidence. Note that the development of Dutch *je* and *jij* ‘you’ (ultimately reflecting Early Middle Dutch \**tg*) and the rise of *gij* ‘you’ are both discussed in § 9.4.

<sup>37</sup> “Ingvaeronic elements of and Ingvaeronisms in Dutch”.

## 9.1 The cluster T+K

Several different palatalizations concern a cluster of a dental obstruent plus *k* or *g*. The combination *TK*<sup>38</sup> was infrequent in Early Germanic. All instances of *TK* discussed in this section have arisen in the course of Old or Middle Dutch due to syncope of a vowel which stood between *T* and *K*. The resulting clusters have developed into a palatalized combination written as *Tj*. The first three subsections below deal with clusters of the type *Tg*, the next four with the type *Tk*.

### 9.1.1 Personal names in *Gard(is)*, *Roetjar*

The earliest instances of /j/ from \**g* are found in personal names ending in *gard(is)* in sources from Flanders, Zealand, and Holland.<sup>39</sup> The second element (Latinized with a NOM.SG. -*gardis*) contains the feminine \**gardjō(n)*- to \**garda*- ‘fence, courtyard’ or the noun \**gazdjō(n)*- ‘goad, stick’ (Braune & Reiffenstein 2004 § 210 Anm.5). In Flanders, the palatalized variants are frequently found after 1100, but *Idisiardis* already dates from 948 (*Idisiardis*) and there is another attestation from the eleventh century. Here is the Flemish evidence until 1253:

#### a. Names attested (also) with palatalized variants:

- Adalgard: *Aliarden* (GEN.; 12th c., Ghent).
- Boegard: *Boviardis* (11th c., Ghent).
- Boudgard: *Boltiarda* (11th c., SWFla.), *Boudiardis* (12th c., Fla.).
- Edelgard: *Hetheliardis* (12th c., Ghent). With *g*: *Ethelgard(a)*.
- Frogard: *Vorthiardis* (ca. 1183, Axel), *Vorthiardis* (1201–50, Axel).
- Hildegard: *Hildiardis* (1163, WFla., Leys 1959: 143–4). With *g*: *Hildegardis/-a*, *Hildegardus*.
- Idisgard: *Idisiardis* (948, Fla.). With *g*: *Idasgarda* (840).
- Lutgard: *Luiardis* (1221, Ghent; next to *Lugardis*), *Luiardis* (1234–35, Asper), *Lujarde* (GEN.; 1208–12, Ghent). With *g*: *Lutgardis*, *Lugardis*.
- = Lietgart: *Litiardis* (1234–35 copy from 11th c.), *Lieiardis* (idem), *Letdiart* (1201–50, Ghent), *Liardis* (12th c., Ghent), *Lijard* (12th c., Ghent), *Lieiert* (1230), *Liejardis* (1236), *Lieart* (1228). With *g*: *Lietgardis*, *Ligardis*.
- Radgard: *Raiardis* (1201–50, Ghent), *Raiart* (ibidem). With *g*: *Radgert* (996–1029, Ghent).
- Ravengard: *Ravaniardis* (1234–35, Fla.).

38. Meaning \**dg*, \**dk*, \**tg*, and \**tk*. In the first subsection, 9.1.1, palatalization of \**g* is also found after other consonants than \**d* and \**t*, which may have been a secondary development.

39. The attestations are taken from Mansion 1924: 148 (for Flanders before 1000), Tavernier-Vereecken 1968: 29–32 (Flanders 1000–1253), Schoonheim 2004: 96–100 (Holland and Zealand before 1300), and VMNW (Flanders 1200–1300).

- Sigegard: *Siardis* (12th c., Ghent), *Ziardis* (1227, ibidem), *Sywardis* (1241, Temse), *Ziarde* (GEN.; 1234, Assenede).
- Thietgart: *Thitiarden* (GEN.; 1151–1200, Ghent). With *g*: *Thietgarda/is*.
- Wolfgard: *Wlfiardis* (11th c., SWFla.), *Wlfardi[s]* (12th c., SWFla.), *Wlfiardis* (1125, Evergem), *Wulviardis* (1180, Oostburg).

b. Names without attested palatalized variants:

- Alfgard: *Alfgard(a)* (1234–35).
- Belegard: *Belegardis* (11th c.).
- Bergard: *Bergard* (1234–35).
- Ermengard: *Ermengardis/-a*, *Hermengarda* (from 840–77 to 13th c.).
- Folgard: *Folgarda* (840–77).
- Frethegard: *Frethegard* (11th c.).
- Hruodgard: *(H)r(u)odgarda* (from 822 to 11th c.).
- Landgarda: *Landgarda* (840–77).
- Lifgarda: *Lifgard*, *-a* (12th c., copy 1234–35).
- Osgarda: *Osgarda* (840–77).
- Ragingard: *Reingart*, *-dis* (981, 11th c., 12th c., 1130).
- Wildgard: *Wildgarth* (1230, 1234–35).

In Holland and Zealand, no palatalization is found in the period until 1200, witness *Bertgarda* ‘Brechtgard’ (1x), *Ermegardis* (1x), *Ethergarda* (1x) ‘Edelgard’, *Friesgart* (2x), *Hildegarda* (17x), *Lietgardis*, *Liutgarda* (14x), *Ratgart* (1x), *Reingerd* (1x 918–48, copy end 11th c.).

After 1200 in Holland and Zealand, and after 1253 in Flanders, the following forms show palatalization of the velar:

- Edelgard: *Eliaerden* (GEN.; 1293, Dordrecht).
- Evergard: *Euerjard* (1300, Bruges), *Evriarden* (GEN.; Bruges, 1274), *Eueriarden* (GEN.; 1279, Bruges), *Euriarden* (DAT.; 1273, Aardenburg; 1279, Bruges), *Euriarde* (DAT.; 1301–10, Bruges).<sup>40</sup>
- Lietgard: *Lieiert* (1279, Bruges), *Liejard* (1281, 1295, Bruges), *Lieiaert* (1288, Bruges), *Luiart* (1279, Ghent), *verliejaerden* (GEN.; 1285, Bruges); unpalatalized variants are more frequent, e.g. *Liegart* (Oudenaerde), *Lutgart*, *Lugart* (Brabant, Limburg), *Luitgart* (Holland).<sup>41</sup>
- Saxgard: *Saxiardis* (2x; 1264 copy end of 13th c., Egmond, see Gumbert 2008: 53).
- Sigegard: *Ziardis* (1256 Zealand 4x).
- Wolfgard: *Woluiardis* (2x; 1273, Prémontré).

40. Strikingly, this name is not attested in the Old Flemish sources up to 1253 studied by Tavernier-Vereecken.

41. VMNW has no less than six entries for this single name: *Lietgart*, *Ligardis*, *Lutene*, *Lutgardis*, *Lutgart*, *Luyart*.

In summary, palatalization of *-gardis* to *-jardis* is attested from 948 in Flanders and from the thirteenth century in Holland. The absence of Hollandish *j*-forms before 1200 may be due to the small number of texts from Holland in that period. The first member of names with palatalization is found to end in *d* or *t* (Boudgard, Dietgart, Frogard, Lietgart/Liutgart, Ratgart), *f* (Wolfgard), *l* (Adalgard, Edelgard, Elgard), *n* (Ravengard), *r* (Evergard), *s* (Idisgard, Saksgard), and *v* (*Boviardis*). Except for *f* and *v* these are all dental consonants, but, in fact, dentals make up nearly all the consonants that can occur in this position, since a preceding *k* and *g* would assimilate completely to *-gardis*, whereas *h* would disappear. Thus, we can say that *g > j* in these names was conditioned by the contact between -C and *g-*. The compromise solution, viz. that palatalization started after first members in dental obstruents and then spread to other names, is conceivable, but is not explicitly supported by the earliest attestations.

The best illustration of the stages by which the phonetic process took place is given by the name Lietgard = Lutgard, which went from *-tg-/ -dg-* (the initial stage) to *-ti-/ -tj-* (palatalization) and ended as *-i- / -j-* (loss of the dental stop).<sup>42</sup> The palatalization in *Siardis* for *Sigardis* or *Sigegardis* must be connected with the general development of *\*sigi-* to *sī-* in names, and is discussed in § 9.2.1 s.v. *zege*.

The Old Dutch name *\*(h)ruodgēr* from *\*xrōbi-gaiza-*, German *Rüdiger*, is attested in Early Middle Dutch as *Rutg(h)er* mainly in and around Maastricht. In a document from Bruges dated to 1263, we find palatalization in *Roetjar van Ghistelle* ‘Roetjar from Gistel’. There is no need to regard *-jar* as a reflex of Frisian *gār* ‘spear’ (*pace de Vries 1942b: 134*) since unstressed *e* is spelled as *a* in various Early Middle Flemish forms, in particular before *r*. An example is *vlaemscar penninghe* ‘of Flemish pennies’, cf. *van Loey 1976: 82*. Thus, *roetjar* shows the same change of *dg > dj* as the compounds in *gardis*. The second element *\*gaiza-* is also found with */j/* in the name *Boudiaer < \*bald-gēr* in the accounts from Amstelland in North Holland (in 1343; *van der Schaar 1953: 176*)

Earlier scholarship assumed that *g > j* in these names was a Romance development. Förstemann (1900: 599, 608) compares West Frankish names in *iardis* for *gardis*, and supposes that *g-* became *i-* in West Frankish from the ninth century on. Mansion (1924: 19, 270) classifies *Idisiardis* as a French name due to its change of *g* to *j* before *a*. Yet he also admits that nothing points to the said *Idisiardis* being a person of Romance descent. Indeed, Romanists now hold a different view. The Old French

42. The forms with intervocalic *g* (*Ligardis* etc.) can be explained from the Old Flemish tendency to delete the initial dental of a cluster of *d > t* plus a consonant (Tavernier-Vereecken 1968: 582), the oldest example of which dates to the 11th century, viz. *Ogerus* for *Odgerus*. Hence, *\*Lietgardis* could apparently become either *Lietjardis* or *Liegardis*.

names of Germanic origin have been collected by Morlet 1968. Examples of names in *-gardis* include Adalgardis (seven times with *g*, once as *Adaliardis*), Hildigardis (10x *g*, 11x *i*), Leutgardis (usually with *g*, but also 1x *Ledeardis* and 1x *Leyarda*), and Ragnegardis (7x *g*, once *Rainiardis*). The spelling with *g* is still found in a majority of cases, and Morlet (I: 16) writes that in the forms in *iardis*, the syncope of *g* can be explained by the fricative pronunciation of the Germanic *g*. In other words, she regards *g > j* in these names as the result of the (occasional) incorporation of the fricative pronunciation of West Frankish /g/ as /j/ by speakers of French.

There are also internal objections against ascribing the Old Dutch names in *iardis* to Romance influence. Firstly, one would expect to find French influence also in other (elements of) Dutch names, but that is not the case. Secondly, Old French influence may be contemplated for Flanders, but is less likely for the names in *iardis* from Zealand and Holland, which are further removed from the French area.<sup>43</sup>

### 9.1.2 The prepositions *tegen* ‘against’ and *jegens* ‘towards’

Proto-Germanic \**gagn(i)-* (EWAhd IV: 7–9) ‘toward, against’ yields OHG *gagan*, *gegin*, MoHG *gegen*, OS *gegin*, OFri. *jēn*, *jōn*, OE *gegn-*, *gēan-*, MoE *a-gain*, *gain-say*. The combination *\*gn* has regularly been palatalized to *\*jn* in English and Frisian; in addition, initial *\*ge-* has become *je-* in Old Frisian. In Old Dutch, the Leiden Willeram shows one attestation with palatalization (*iegen*) against another one without (*gegen*), whereas the text preserves *g-* in *ingegeen* (5x), *ingegean* (1x), and *angegeen* (1x). The Wachtendonck Psalter always preserves *g-*, viz. in the preposition *anegegin* (4x), *anegeginne* (1x) and in the nouns *geginloup* ‘occursus’ and *geginuuirdi* ‘presence’. In Middle Dutch, initial *g-* is sporadically preserved, viz. in *ghegen* (Axel, East Flanders, 1251–75), *geghen* (Breda, 1269), *gheghen* (Ghent, 1372; CRM14), and in the adjective *gheghenwordighen* ‘present’ (Deventer, 1300).

In Modern Dutch, the earlier preposition is continued by *tegen* ‘against’ and *jegens* ‘towards’.<sup>44</sup> Both variants have their roots in the thirteenth century. All

43. Förstemann (1900: 606) also compares West Frankish names in *iaud* from WGm. \* *gaudus* (the element is not explained for certain, but it could be a lenited form of \**gautu-*). In Old Dutch, I found only one palatalized instance in *Odiodus* (in a source from 923; Mansion 1924: 20), as against a larger number of forms with retained *g* (*Adelgot*, *Adhelgodus*, *Hilgot*, *Radgot* in Mansion 1924: 42, *Odgaudus*, *Otgotus* and others in Tavernier-Vereecken 1968: 132f., 136f.). The interpretation of *Odiodus* therefore requires a new analysis of the document in which it occurs.

44. *Jegens* arose as a variant of Early MDu. *jegen*. In the thirteenth century, *-s* is only found in Holland, Utrecht and Zealand (and twice in Ghent). The exact source of *-s* is uncertain since, in the thirteenth century, adverbial *-s* was not yet productive; cf. EWN.

etymological dictionaries of Dutch claim that *tegen* arose from *te* plus *jegen*, whereas *jegen(s)* itself is explained by EWN as the North Sea Germanic outcome of *gegen* with palatalization of \**g*- to *j*-, as in Dutch *jij* ‘you’ beside *gij* ‘ye’. Close scrutiny of the Early Middle Dutch evidence reveals that this explanation of *tegen* is imprecise, while that of *jegen(s)* is uncertain at best. The chronology and dialect geography of the various attestations (see Mooijaart 1992 and VMNW) rather suggest that *tegen* and all its variants with other dental obstruents (*tsj*-, *ts*-, *s*-, etc.) developed from the combination of *te* ‘to, at’ plus *gegen*. In Dutch, *te-gegen* almost completely replaced *gegen*. This possibility was hinted at by Mooijaart (1992: 201): “Misschien ook zijn de vormen met (palatale) *s* in *tsjegen* e.d. rechtstreeks uit *te* + *gegen* ontstaan”.<sup>45</sup> She finds no concrete evidence to prove this, but southeastern Dutch does provide hints in this direction, as I will show, and other dialects are not incompatible with such a scenario.

The combination *te* + *gegen* (MHG *zugegen*, *zegegen*) preserves initial *g*- in a few literary manuscripts from the Cleves/Guelders area. The Aiol fragments (1220–40) have twice *te gegen* versus once *thiegen*. Contemporary with these fragments is *tjegen* in the Glossarium Bernense (1240) from Limburg. There is also once *tgegen* versus usual *tegen* (6x) and *tegens* (33x) in the *Moraalboek* (1270–90) from the same Lower Rhine area. The internal evidence of the latter text thus confirms that *tegegen* belonged to a more archaic register. The data under review suggest the following chronological order of developments: original *te gégen* (with the main stress on the first syllable of *gegen*) became *tgegen* (loss of pretonic shwa) whence *tjegen* (palatalization) and finally *tegen* (cluster simplification).

### *Regional distribution between 1200 and 1300*

The totality of the dialects shows an enormous spelling variation in the thirteenth century, but many variants are restricted to a specific region or set of regions.

a. Initial *t(e)geg-*:

The retention of the first *g* is a rare phenomenon altogether. We find sporadic cases in the Cleves/Guelders area (*te gegen* 2x in the Aiol fragments, 1220–40, *tgegen* 1x in *Moraalboek*, 1270–90) and in Flanders (once *tgeghen* in Bruges in 1279, once also in a charter from Sluis, 1320). Two documents from Monster in western Holland from 1299 have *tgeghenwordeghen* ‘present’.

b. Initial *i-* or *j-*:

*ieg(h)en*, *jeg(h)en* is the numerically dominant form, especially in West and East Flanders (ca. 1600 times in a variety of locations; sometimes rounded to *jog(h)en*,

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45. “Maybe the forms with (palatal) *s* in *tsjegen* etc. arose directly from *te* + *gegen*.”

*joeghen* in Bruges), Zealand and Southwest Brabant. It is also found in Northwest Brabant, in Holland and Utrecht, and in Alden Biesen in Limburg.<sup>46</sup> In East Brabant it is rare (only 3x). *Ieghens* is mainly found in Holland and Zealand.

c. Initial *tie-*, *thie-*:

The combination <t(h)i->, which probably indicates biphonemic /tj-/ (though an attempt to spell an affricate /tʃ-/ cannot be excluded), is most characteristic of Holland (64x *t(h)ieghen* or *tieghens* in Chancellery documents), and, to some extent, of West Flanders (60x *t(h)ieghen*, of which 49x in Bruges). Isolated occurrences are found in East Flanders, Zealand, Antwerp, West Brabant, and Cleves/Guelders.

d. Initial *te-*:

Numerically, *t-* is most frequent in the Cleves/Guelders area (74x *tegens*, 9x *tegen*) and in Holland (42x *teghen(s)*), less so in Utrecht (9x) and Bruges (23x).

e. Initial *tsi-* and *tse-*:

These minor variants are found in Flanders, Antwerp and South Holland: *tseghen* once each in Antwerp, Ghent and Bruges, and twice in Assenede (EFla.), *tsieghen* once in Bruges and twice on the island of Putten (SHol.).

f. Initial *sc(h)-*, *ch-*:

The variants *sceghen* and *schegh(en)* are nearly only found in East Brabant (48x), but *sceghen* also once in Ghent. The variant *chegh(en)* occurs in East Flanders (5x in Ghent, 3x in Velzeke 3x), in West Brabant (11x in Willebroek, once in Tervuren), and in Limburg (10x in Maastricht).

g. Initial *s-*, *si-*, *sci-*:

These are rare variants, all occurring in southern Dutch. *Scieg(h)en* is found in East Flanders (9x), *sieghen* twice in Bruges, and once in Ghent and East Brabant. Southwest Brabant has five times *seghen* and once *zeghen*.

h. Initial zero:

*eghen* (Sinaai, EFla., 1298) and *eghenwerdeghe* ‘present’ (Dilbeek near Brussels, 1296).

### *Spelling the palatalization*

The development of *tj-* to *tsj-*, *ts-*, *s-*, and *t-* recalls the spelling *ts-* (maybe for [tʃ-]) in combinations of a word-initial dental stop plus etymological *j-*, such as *tsare* ‘in this year’ from *te jaere*, *tsaers* ‘yearly’ from *des jaers*, and *tsarmeer* ‘in future’ from *te jare meer* (Franck 1910: 110). A similar treatment affects the initial affricate in French loanwords which had [tʃ] in Old French, such as ‘census’ and ‘charter’ (Pijnenburg

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46. Compare also *iegenworde* ‘presence’ in Gl.Bern. (1240).

et al. 1997: 94–5, 144), which were eventually adopted into the Dutch phonological system with initial /s/ or /ʃ/. Compare Early MDu. *czins*, *tsens*, *chens*, *csens*, *cens*, *sens*, *tsijns*, etc., ‘census’, leading up to MDu. *chijns*, *sijs*, MoDu. *chijs*, *cijns*. For ‘charter’, we find the Early MDu. spellings *chaertre*, *tsaertre*, *tsiaertre*, *saertre*, Early MoDu. *certer* (MoDu. *charter* has been borrowed from English in the nineteenth century). These variants perfectly match the different combinations with which the initial sound of ‘against’ was written in the thirteenth century. Just like \**tgegen* has become *teg(h)en* in Holland (beside *tieghen*), Utrecht, and Cleves/Gelderland, ‘census’ has initial *t-* in *thiens*, *thiins* in Holland and Utrecht in the thirteenth century, and *tins*, *tiins* in eastern dialects in CRM14. The joint evidence of *togen* and *tijns* makes the hypothesis of Van Reenen (2014: 92, 103–4), viz. that northern Dutch *tijns* is a loanword from Low German *tins* that was independent of southern Dutch *tsijns*, less compelling (though not impossible).

### *Explaining *jegen(s)**

We must still explain *jegen(s)*, which rapidly became the most frequent form of the word in Early Middle Dutch. Since there is no general palatalization of *g-* before stressed *e* in this period in any dialect, the *j-* of *jegen(s)* has been ascribed to Ingvaeanic palatalization, which would in this case have entered the mainstream dialects. A clear case of such a development appears in the form *iegin* in the Leiden Willeram (ca. 1100), which may belong to the Frisian characteristics of the manuscript (cf. Sanders 1974: 308–12). The only reliable instance of such a general palatalization of *g-* in Dutch is found in the prefix *ge-* of participles and collectives. But here it occurs in a pretonic syllable which may have been subject to a specific phonetic reduction, and the palatalization in the prefix *-ge-* is restricted to the coastal provinces whereas initial *j-* in *jegen* is also found in Brabant and Limburg. Hence, the dialect geography speaks against a coastal Dutch development.

Franck (1910: 93) ascribes *jegen* < *gegen* to dissimilation of the first *g-* in order to avoid two consecutive fricative *g*’s. This explanation cannot be excluded, but it is not the most convincing one. Firstly, we have no other example of such a dissimilation. Secondly, and more importantly, the sporadic preservation of *gegen* across the different dialects in the thirteenth and fourteenth centuries, versus the attestation of *jegen* also in all dialects, would be difficult to explain under this scenario.

I therefore favour an alternative solution. *Jegen(s)* probably represents another outcome of the palatalization of *tegegen* to *t(s)jegen*, but not by way of direct phonetic change. After all, loanwords like *cijns*, *tijns* ‘census’ and *saertre* ‘charter’ never acquired initial *j-*. *Jegen* may therefore be due to metanalysis of *tjegen* as \**te+jegen*, that is, the preposition *te* was analogically restored. The model for this restoration would have been provided by native forms such as *tsaers* ‘yearly’ and *tsare* ‘in this

'year', which probably remained transparent combinations of *des* and *te* plus *jaar* 'year'. As a result, the primary form of the preposition was felt to be *jegen*.

It does not seem possible to provide definite proof for this scenario on the basis of the attestations. The earliest Middle Dutch text from Ghent, the bylaws of the leprosarium, written in 1236, has a single instance of *chehen*. In the next document, likewise from Ghent (CG nr. 0004), from 1237, we find *chehen* and *iegen* side by side: eleven times *iegen* (and thrice *iegenwordech*) against four times *chehen* in exactly the same semantic and syntactic usage. Whereas *iegen* is found mainly on folios 30 to 35 of this text, *chehen* occurs only on folios 36 and 37, together with *iegen*.<sup>47</sup> Note the co-occurrence of both variants in the following sentence: *So wie so yemene meshandelt of mesuort. ende uan hem bedregen wert; hi sal er betren iegen den ghenen dar hi af bedregen es; dane chehen den graue* (fol. 36.15)<sup>48</sup>. The simultaneous use of both forms would be easier to explain if *iegen* came directly from \**gegen* and *chehen* from \**te+jegen*, but that would still leave unexplained the concrete evidence from southeastern Dutch dialects for the change \**tgegen* > *tjegen*, and their contemporaneous use of *iegen*, *jeghen* from 1265 onward. Unless we explain the latter forms from lexical diffusion of the Flemish and Hollandish preposition in the middle of the thirteenth century (which hardly seems likely), the southeastern *j*-forms must be due to the metanalysis of *tjegen* as *te+jegen* in any case. Thus, we can either assume a separate rise of *jegen* in Flanders (via dissimilation *gegen* > *jegen*) and further east (metanalysis of *tjegen*), or we accept that the same metanalysis took place several times in different regions, viz. some time before 1237 in Flanders but not before 1240 in the southeast. The full, analytical combination *te ieg(h)en* is only attested once in 1285 in West Flemish (*Rijmbijbel*) beside more usual *tjeghen* and *tghen*.

In the form *eghen* (under point h above) there is no initial consonant at all. Since prevocalic *j-* does not normally drop, I see no other option but to ascribe *eghen* to a reanalysis of *tegen* as \**te+egen*. If this is correct, it increases the likelihood of the scenario sketched above for *jegen*.

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47. 0004 Ghent 1237 *chehen den graue* 36.15, *chehen den ghenen* 36.35, *chehen den graue en[de] chegen de stat* 37.6–7; *houet iegen houet* 30.27, *iegenwordech* 30.32, *iegen den graue* 31.30, *iegen den iegen dane iegen den graue* 32.16, *dire iet iegen doed* 32.32, *iegen den ghene* 32.38, *iegen den graue* 32.42, *iegen den graue* 34.5, *iegenwordech* 35.15, *iegen den ghenen* 36.15, *iegen den graue* 36.39, *iegenwordech* 37.35, *dar+iegen* 38.30.

48. 'Whoever maltreats or assaults someone and is accused by him: he must rather compensate the person by whom he was accused than [compensate] the count'.

## Distribution between 1300 and 1400

The eastern dialects preserved initial *te-g-* and *tg-* longer than the western ones, as can be seen from the data of the fourteenth century. The full sequence *te-g-* occurs only once in *tegegeworge* ‘present’ (for \**te-gegen-wordige*) in Susteren in East Limburg in 1354 (CRM14). Initial *tg-* is also represented in fourteenth-century documents from Utrecht (once), Drente, Overijssel, Guelders, East Brabant, and Limburg. Attestations include *tgeghenwordich* (Utrecht 1341), *tgheghen* and *tgheghenwordighen* (De Wijk, Drente, 1367), *tgeghen* (Zwolle 1344), *tgheghen* (Zutphen 1351), *tghighens* (Kampen 1375), *tgeghenwerdyghen* (Doesburg 1366), *tgeghenwordighen* (Laag-Keppel 1364), *tgegenwordigen* (Gemert 1394), *tgegenwordg(h)en* (Maaseik 1343, 1349), *tgegenwordicheit* (Pietersem 1367), *tgeghen* (Zoutleeuw 1373), *tgeg(h)en* (Sint-Truiden 1375, 1379), *tgegenwordigen* (Brustem 1386), and *tgegenwerdeghen* (Lummen 1392). A late instance of *tgegen* occurs in a charter by Gerart of Cleves from 1417 (Roks 2011: 37). Still, in the same documents from the same eastern regions in this same period, the predominant initial spelling in these words is <ti->. Therefore, <tg-> is probably an archaism which may already have been pronounced as *tj-*.

### 9.1.3 Yerseke

This toponym from Zealand is a compound of \**gēr* ‘pointed piece of land’ and \**sikō* ‘stream’ (van Berkel & Samplonius 2006: 513). In Old Dutch, we only find unpalatalized forms: *Gersake* (966 copy 15th c.), *Gersicha* (980 copy 15th c.), *Gersecha* (1186), *Gerseca* (1219). After 1219, all forms have a palatalized initial consonant, which could have arisen in the prepositional phrase \**te Gerseke* ‘in G.’. This would become *t'Gerseke* by elision of the schwa, yielding the input *tg-* for palatalization to *tj*. The second syllable has unstressed <i> in *iersike*, *jiersike*, *yersike* (West Holland, 1299), <e> in *jerzeke*, *jerseke*, and zero in *yerske*, *jerske*, *jeerske* (Antwerpen, 1248–71).

### 9.1.4 The diminutive suffix *-eken* > *-(e)tje*

The diminutive suffix of Modern Dutch has five different allomorphs, viz. *-je* (e.g., *pot-je* ‘little jar’, *hoef-je* ‘little hoof’), *-tje* (*zaal-tje* ‘little hall’, *been-tje* ‘little leg’), *-etje* (*kamm-etje* ‘little comb’, *pinn-etje* ‘little pin’), *-pje* (*bloem-pje* ‘little flower’), and *-kje* (*koninkje* to *koning* ‘king’), cf. ANS s.v. ‘Verkleinwoord’. The exact distribution is complex, and some nouns have two different diminutives (*kipje* vs. *kippetje* to *kip* ‘chicken’). The spelling *tj* suggests a biphonemic combination of *t* plus *j*, but phonetically (and, some have argued, also phonemically) we are dealing with a palatal

stop [c]. In the dialects, additional allomorphs occur which, moreover, often have a different distribution from their standard counterparts; see Pée 1936. For instance, a typical distribution in the southern dialects of Brabant and Limburg would be the following: the allomorph  $-[(c)\sigma]$  after *t*, *d*, *n* (*t* and *d* merging with the palatal stop);  $-k\sigma$  after *r*, *l*, *s*, vowels, and labials; and  $-sk\sigma$  after velars.<sup>49</sup> Dialects in which *i*-mutation is a productive morphological process show *i*-mutation of back vowels in the stem of diminutives.

The oldest form of this suffix (which, in Old and Early Middle Dutch, competed with other diminutive suffixes such as *-lijn*, *-sijn*, *-elkijn*) in Middle Dutch is *-ekin*, *-ekiin* /-ækɪn/ from PGm. \*-*kīna*. It is clear, therefore, that the modern dialects and the standard language show either the preservation of \**k* (in dialectal *-ke*, *-ske*), or its palatalization to /c/ or /j/. Scholarly discussion has centred around the phonetic path and the geographic spread of the palatalization.

According to an older theory proposed in the 1920s by Kloeke (1923, 1925), and adopted among others by Schönfeld & van Loey, it was the front vowel character of the following Old Dutch \**i* which caused the palatalization of *k*; a preceding *t* would have been an additional factor in this process. The change would have started in (North) Holland, as this is where the oldest written attestations of a change from *k* to *ki* and then *tg* or *tj* are found, from the fourteenth century onwards. The resultant palatal stop /c/ then spread from Holland to the east and south due to the economic and political dominance of Holland after 1600.

Kloeke's theory was immediately called into question by de Vries (1925, 1927, 1928) and by Kern (1929: 54, 68–74), who drew attention to dialectal data from other areas than Holland, which also show a relatively early palatalization. Early enough, that is, to render their origin from lexical diffusion from Holland doubtful. De Vries and Kern argue that palatalization was due to the contact of *k* with a preceding *t* or *d*. For instance, \**hōdekin* 'little hat' > *hoetken* > *hoetgen* > *hoetje*.

There are two reasons why the objections against Kloeke's theory are cogent. Firstly, long /i:/ does not cause palatalization of *k* or *g* in any other Dutch word. Secondly, the distribution of diminutive allomorphs in the Dutch dialects shows that *k* was not palatalized under all circumstances (as one would expect if a following /i:/ was the cause). Rather, it is only after *t*, *d*, *n* that we find palatalization in most dialects. This points in the direction of stem-final dentals as the locus for the palatalization. In Kloeke's defense, one may note that the full scale of the dialect distribution was not widely known before Pée's monograph of 1936.

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49. After a stem-final velar, an extra *s* was apparently added to keep the *k*-suffix distinguishable (Marynissen 1974).

Van der Hoek 2009 follows Kloek's explanation of the palatalization being caused by *\*i*, but at the same time, he acknowledges a multi-regional origin of the change. He thinks that "at one time the language had an extensive system of palatalized consonants" (p. 71). The restriction of palatalization to the diminutives would be due to the concomitant vowel shortening, but van der Hoek does not explain what the causal link would be. In fact, the historical record shows that vowel shortening lags behind the first stages of palatalization by some centuries. Although it is quite likely that Dutch had allophonically palatalized velars before front vowels (the data on *\*g* point in this direction), this does not help to explain the attested distribution of the diminutive suffix. Palatalization of *k* before *\*i* or *\*ī* is not otherwise found in Dutch, whereas there are several good indications that dental-velar clusters were prone to yield palatalized outcomes.<sup>50</sup>

In her 1998 article on the history of the diminutive suffixes in southern Dutch dialects after 1200, Marynissen definitely proves the correctness of de Vries' theory. The palatalization of *-t/d-ke > -tje* must be regarded as a polygenetic change, which had (at least) four different centres of innovation in Dutch. Marynissen bases her investigation on the two toponyms 'street' and 'field', which end in dental stops and are widely attested in local records of all periods. This allows her to follow in detail the path of palatalization of the final consonant of these two nouns from 1200 to the present. The evidence shows that the palatalization can be regarded as an independent development in each region, which happened (or surfaced in the sources) at different moments in different regions in Late Middle or Early Modern Dutch. Taking into account Marynissen's results, we must distinguish at least four different core areas of palatalization:

1. (North) Holland. Here, palatalizing spellings are found from the end of the thirteenth century, particularly in personal names. The evidence is discussed in some detail by van der Schaar 1953: 189–202, who distinguishes four groups of spellings (besides original *-kijn*, *-kin*, *-ken*). I cite them in their probable chronological order:
  - a. *kiaen*, found particularly in South Holland in the fourteenth century: *Drutekiaen* (Leiden 1319), *Gosekiaens* (Leiden 1335), *Boudekiaens* (Leiden 1344), *Rogghekiaens* (Leiden 1358), *Foykiaen* (Leiden 1370), *een eruekiaen* 'a small property' (Leiden 1380), *Hertekiaen* (Delfport), *Claes Ossenkiaenssoon*

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50. Van der Hoek has misunderstood Kern 1929, to whom he ascribes the claim that "the single consonant */k/* changes into a consonant cluster *\*/tx/*". Yet Kern explains his view at length on p. 68, concluding: "Dat een groep */tk/* of */t'k'/* zich haast onvermijdelijk weldra tot */t'x'/ > /t'/*" moet ontwikkelen, behoeft geen betoog." [It goes without saying that a group */tk/* or */t'k'/* soon almost inevitably had to develop into */t'x'/ > /t'/*.]

(1323 Zealand). The actual pronunciation is uncertain. If we assume that *k* still represents [k], *i* indicates palatality, and if *ae* renders a lower vowel than *e* or schwa, we may conjecture -[k'æ(:)n] or -[cæ(:)n].

- b. *kajen* (with anaptyxis of *a* from \*-*kjen*?): *Ludikajen*, *Clais Dumikajen*, *Romikaien uyt Oesterland*, *Diddikajen*, *Bonikaien*, *Heynikajes* (GEN.), all in a count's document from 1319 with names from West-Friesland; *Ghizikaien* ('Gijsken', 1322, probably from Westland in South Holland). Since this variant occurs only in two documents from 1319 and 1322, both from the administration of the Count of Holland, it seems likely that *-kajen* is a personal variant from a single scribe.
  - c. *tiaen* and *iaen*, in which <ae> may indicate a low front vowel /æ:/. These are found particularly in North Holland. Most words are spelt with a dental obstruent, as in the names *Calletiaen* (13th c.), *Wittetiaen*, *Heynetiaen*, *Doedetiaen*, *Coppaciaens* (Haarlem 1347), *Foeytiaen* (Haarlem 1361), and in appellatives such as *lappetiaen* 'little piece', *vennetiaen* 'little lake', *endetiaen* 'little end', *sticketiaen* 'little piece'. Spellings with only <j> are *Abbejaen* and *Dirckiaen*.
  - d. *tgi(i)n*, particularly in sources from southeastern North Holland after 1340: *keteltgin* 'small kettle', *stiertgin* 'little bull', *broedertgiin* 'little brother', and many names: *Hughetgin* (Weesp), *Lammetgin* (Edam), *Ghisetgiin* (Amsterdam), etc. In South Holland, we find *-tgen* after 1380, as the chronological successor of *-kiaen*: *Ghijstgens* (Delft 1382), *Soytgens* (Leiden 1399), *Snoeytgen*, *Doedetgen* (Den Haag 1397). The palatal pronunciation of *tg* as [tʃ] or [c] is secured by the spelling of *sinte ponstgens dach* 'Sint Pontian's day' (Haarlem 1399, and others), since Pontian is usually spelled *Ponciaen* or *Pontiaen*. In the sixteenth and seventeenth century, *-tge(n)* becomes very frequent in documents from Holland, later followed up by *tje* (after 1600) and *ie* (by vocalization).
2. Northeastern Dutch. Groningen shows the development of *-kijn*, *-ken* in the fourteenth century to *-gijn*, *-gin*, *-gen* in first part of sixteenth century, e.g. in *ffantghen* 'little banner'. In Drente we find *Reyntyen* 'Reineke' (1447), cf. de Vries 1925.
  3. Southern Flemish. One of the earliest attestations is *straettijn* 'little street' (Wervik 1414), with *tt* indicating palatalization (Marynissen 1998: 256). From the sixteenth century onwards the palatalization seems to have become established in southern West Flanders and southwestern Brabant, and it soon spreads beyond. The oldest forms in East Flanders are 1530 *stretien*, 1540 *straetjen*.
  4. Limburg and southeastern Brabant. Palatalization is first attested in the fifteenth century: 1436 *straetghen* 'little street' (Vechmaal), 1447 *straetgen* (Maaseik), 1479 *straethen* (Diest). Its northward spread can be followed in the documents

if we look at personal names with a diminutive suffix, which can occur both as a first name (*Liesbetken*) and as a surname (*Steynkens*). In towns such as Neeroeteren in 1461 (Segers 2003) and Sittard until 1450 (Wethlij 2004), *-ken* is still the only attested suffix after names ending in *t* or *d*. In North Limburg, *-ken* changes into written *-gen* fairly abruptly in the first half of the sixteenth century, as in Kessel-Eik (1516),<sup>51</sup> Sevenum (by 1530), Oirlo (1550) and Venray (1570), cf. de Vaan 2012c. The precise pronunciation of the combination *tg* is not known: it may have been an affricate [tʃ], but we also find the spellings *ti* and *ty* in the same period (e.g., in Oirlo *Geritye* 1551, *Baertien* 1562). There is reason to believe that *tg(h)* was a standardized spelling for the affricate or sibilant in diminutives in the sixteenth and seventeenth century.

We may conclude that the diminutive suffix provides abundant evidence for palatalization in the cluster *tk* in Middle and Early Modern Dutch.<sup>52</sup> Since the oldest form of the suffix was *-ekin*, later also *-eken*, syncope of the schwa which stood between the dental consonant of the base and the *k* of the suffix was a preliminary condition for the palatalization. The regional differences in the chronology of this syncope must be part of the explanation for the regional differences in the date of the rise of palatalization.

### 9.1.5 *Kortgene*

This town on the island of North Beveland is a compound of *kort* ‘short’ and *kene* ‘small stream’ < PGm. \**kinan-*. The oldest attestations are from the thirteenth century: *Cortkeen* (1247), *Kortekine* (1271), *kortekene*, *kortekiene* (WHol. 1299), *Coirtkene* (1333); cf. van Berkel & Samplonius 2006: 245 and VMNW. In 1347 we first find *Cortgene* with *g*, and in 1605 *Corthiene* with the first explicit spelling which indicates /j/. The name is presently pronounced as [kɔrt'χen]. The development of *tg* after the syncope of word-internal schwa shows that it was the contact between *t* and *k* which caused the palatalization of the velar stop.

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51. *Lietgen van Eijck*, see <http://www.loegiesen.nl>.

52. As Jarich Hoekstra reminds me, there is independent evidence for the same development in North Frisian (Fering–Öömrang), where *tk* and *dk* have also become *tj*, e.g., *fōtj* ‘little foot’ (\**fōtik*), *hōntji* ‘little dog’ (\**hundikīn*), *eetj* ‘vinegar’ (\**etik*), *pretji* ‘preach’ (\**predikia*), *letj* ‘little’ (\**litik*) (Hofmann 1961: 8).

### 9.1.6 *edik* ‘vinegar’

Besides modern *azijn*, which was borrowed from French, Dutch has *edik* ‘vinegar’, which corresponds by and large with MoHG *Essig*, OHG *ezzīh*, MLG *et(t)ik*, *etek*, *atik*, OD<sub>U</sub>. *etige* (DAT.SG. Wachtendonck Psalter). This word was borrowed at an early date from Latin *acētum* (EWAhd I: 1190–1). OS *ecid* and OE *eced* retain the original order of *k* and *t* as in the Latin word, but other West Germanic dialects acquired the word with metathesis of *k* and *t* as a masculine *a*-stem \**atika-* (whence OHG, MoHG *Essig*) or, with Romance lenition *t* > *d*, as \**adika-*. In Early Middle Dutch, the noun is found as *edek* (in the west) or *etek* (in Cleves/Gelder), DAT. *edeke*, GEN. *eteks*. Loss of intervocalic *d* explains the subsequent form *eek* at the end of the Middle Dutch period. After the seventeenth century, *edik/eek* disappear from the written language.

In some southern dialects, the word has remained alive until the present day. Map 58 in Roukens 1937 II (and the comment in 1937 I: 302–4) and the relevant maps in van de Kerckhove 1949, Weijnen 1965b, WLD, and WBD show monosyllabic *eek* /e:k/, *aek* /ɛ:k/ in large parts of Limburg and in northeastern Brabant. Disyllabic forms with a palatal affricate or stop *aetje* /ɛ:cə/ or *aetsje* /ɛ:tʃə/ occur in some towns in the east of Belgian Limburg and the south of Dutch Limburg.<sup>53</sup> Goossens 1968: 15 compares the geography of the preforms \**adika-* in northern Ripuarian and Cleves/Gelder as against \**atika-* in Ripuarian proper. He proposes that northern Limburgian *eek* goes back to earlier *edek*, whereas southern Limburgian *aet(s)je* represents \**etek*. Although the parallelism between northern \**d* and southern \**t* would support this solution, it leaves the second syllable of *aet(s)je* unexplained. This form can be explained from \**edke* or \**etke*, that is, as the result of syncope from earlier \**edeke* or \**eteke*. These must represent the originally trisyllabic forms of the oblique cases, which apparently became dissociated from the nominative and accusative singular. This speaks in favour of an original paradigm \**edek*, \**edeke* > *aek*, *aetje*, in which the variants *aek* and *aetje* became so dissimilar that the generalization of one of these two forms as the single form for ‘vinegar’ is trivial. If South Limburg had had \**etek*, \**eteke*, we would expect strong *aet(s)ek* (as in Ripuarian) and weak *aet(s)je*, and *aet(s)ek* would have had more chances to survive.

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53. Due to their ending, they could be interpreted as diminutives, as for instance in Bree (Dupont 1922: 44).

## 9.2 Palatalization of word-internal \*g to (\*j)

In about fifty different Dutch lexemes, the combination of a short vowel plus *g* has yielded a diphthong *ei* (MDu. MoDu. /ei/) or *ij* (MDu. /i:/ > MoDu. /ei/). Sometimes the whole Dutch area has palatalization, sometimes all dialects preserve *g*. In many other lexemes, some dialects keep *g* and some palatalize it. The handbooks offer different generalizations for these changes. Schönfeld & van Loey 1970 § 64 propose two rules: 1. *\*agi* and *\*egi* > *\*egi* > *eg'i* (= palatalized *g*) > *\*eje* > *ei*; 2. *\*igi* > *ēge*. A third change of *\*egC* > *ei* is regarded as a more sporadic development. Van Bree (1987: 87f.) adopts the same changes 1 and 3 for *\*agi* and *\*eg(i)*, but cautions that not all dialects behave in the same way. Unlike Schönfeld & van Loey, van Bree claims that *\*igi* also becomes *ei*, adducing MDu. *leit* ‘lies’ < *\*ligip* as an example. Franck (1910: 107) surmises that “Germ. *eg* is vielleicht nur vor Konsonant zu *ei* geworden” and “Beim Umlaut scheint dagegen *egi* zu *ei* geworden zu sein. Aber wann *egi ei* wird und wann es erhalten bleibt, erhellt nicht (*ei* nur in Silben auf die unbetonte Silbe und dann Nebenton folgte?)”.<sup>54</sup> Van Loon (2014: 187–8) separates the development of Old Dutch *-egi-*, *-igi-* > *-ei-*, which is also found in Middle High German (where *-igi-* becomes *-i-* and *-egi-* becomes *-ei-*, cf. Paul, Klein, Solms & Wegera 2007: 137), from the vocalisation of *g* to *j* after a palatal vowel and before a consonant, found in Anglo-Frisian and western Dutch.

Most scholars thus distinguish between two separate developments with different geographic scope, but the precise conditions governing these changes remain unclear, as does the place of these changes in the relative chronology of Dutch sound changes. Some other changes are also relevant to this topic, including (1) fricativization of *g*, (2) Old Dutch fortition, i.e., the alternation of voiced and voiceless fricatives before *l*, *n*, *r*, as in Dutch *tegel* vs. *tichel* ‘tile’, *gavel* vs. *gaffel* ‘fork’, (3) lengthening of short vowels in open syllable, (4) syncope of word-internal unstressed vowels. All of these changes took place at different moments in different parts of the Dutch linguistic area. Finally, inner-paradigmatic alternations must be taken into account. For instance, WGm. *\*regna-* would give Old Dutch NOM.ACC. *\*regan* but GEN.DAT. *\*regn-*, yielding different conditions for many of the changes just listed.

In the scholarly literature on Old Saxon and Middle Low German, the issue is treated in a somewhat different fashion. Gallée (1993: 50) notes the occurrence of forms such as *Meginrickesdorf* and *Egilbertus* (Westphalia, 980), with preserved *g*, next to palatalization in *Meynburghun* (Corvey), and of *Regin-* next to *Rein-* in

<sup>54</sup> A similar rule of only preconsonantal palatalization was tentatively formulated by Mansion (1924: 270) but rejected immediately by himself on the grounds that the intervocalic spelling <*g*> could sometimes indicate /j/. Our MDu. and MoDu. evidence proves the reality of /g/ for most of the relevant forms.

other personal names. Gallée also remarks that *ei*, *ai* are more frequent in the eleventh century than in the tenth. On p. 74 and 170–2, he considers a development *agi* > *egi* > *eji* > *ei*. In the personal names of the Werden charters (between 793 and 848; Blok 1960, Bohn 1931, Tiefenbach 1997: 195f.), we can see the changes of *egi* > *ei* and *igi* > *ii* happening before our eyes. Since other names with a disyllabic first member ending in a consonant do not generally show syncope of the second vowel in this period (compare names in *Beren-*, *Irmin-*, *Idis-*, *Mathal-*, *Wandil-*, *Warin-*), nor do names with an *u*- or *jō*-stem as their first member (*Frithu-*, *Hathu-*, *Hildi-*), the shift *egi* > *ei* cannot be due to a general vowel syncope. We must rather assume that *egi* was pronounced as [eji], in which the consonant further developed into *j*; apparently, there was hardly any audible difference between, e.g., *Rejin-* and *Rein-*. Tiefenbach (1984: 329) shows that *egi* > *ei* is almost regular in the ninth to eleventh-century names from Essen (1984: 144, 170), whereas in Xanten (1984: 64, 94) and Cologne (1984: 236, 262) the palatalization of *g* is only starting in this period. The relevant names from Tiefenbach's material have as their first member *Egil-/Eil-* (\**agila-*), *Megin-/Mein-* (\**magina-*), *Regin-/Rein-/RaIn-/Rem-* (\**ragina-*) and *Sigi-/Si-* (\**sigi-*), which are all discussed below. Thus, Essen and Werden both show an early, ninth-century date of the palatalization, which then spread westwards. Note that word-initial \**Agi-C-* shows early syncope without palatalization: *Egibertus*, *Egburg*, *Ecdagus* in Xanten, *Ekbertus*, *Ekbrand*, *ekhild* in Essen, *egbertus*, *Ecuuinus* in Cologne. Possibly, these names were influenced by the first member *Eggi-*, *Ek-* from \**agjō-* (thus Tiefenbach 1984: 340). The second member *-dag* is never found as *-dei* in Essen, but the number of relevant tokens is small.

For Middle Low German, Lasch (1914: 83f.) posits a development of *egi + dental* via *eg + dental* to *ey + dental*, in which syncope precedes palatalization. When syncope did not occur, she continues, *egi* underwent lengthening to ēge and *g* remained: modern Soest dialect *iəžə* (< \*ēgede) versus Ostphalian *eyde* (< \*egde) 'harrow'.

### 9.2.1 The evidence

The relevant evidence from all periods of Dutch is presented in alphabetical order according to the Modern Dutch entry. The focus will be on the etymology and the extent to which palatalization is attested chronologically and geographically.

1. *breidel* 'bridle' < \**bregdila-*. Attested with *ei* in all dialects from 1200 onwards, both in the noun and in the verb 'to bridle'. Modern dialects have *breidel*, *breyel*, *breil*, Modern Low German *breidel*. Derived from \**bregdan*, see the next entry.
2. *breien* 'to knit' < \**bregdan-*. MDu. *breyden*, *breyen* (Fla. Hol. 15th c.), in modern dialects of Groningen *bra(a)iden* 'to knit' (Molema 1895).

3. *brein* ‘brain’ < \**bragna-* (MLG *bregen*, *bragen* n.). Late MDu. *brein* (Fla., 1517–18), *bragen* (Hol., 1450–70, NE-Dutch, 16th c.), *braghenpanne* ‘brain-pan’ (Groningen, ca. 1440), *breghen* ‘brains’ (*Teuthonista*, 1477). The Early Modern Dutch form is *breyne*, *brijne* (Hollandish, according to Kiliaan 1599). In the seventeenth century, *brein* is found especially in Hollandish sources. Thus, we roughly find the retention of *a* and *g* in the east as against the development to *ei* in Holland and Flanders, although *ag* is also attested in Holland. This points to an alternating paradigm with NOM.ACC. *bragen* < \**bragn* but oblique *brein-* from \**bragnV-*. The form *bregen* is explained by EWN as due to a North Sea Germanic fronting of \**a* to *e*, but its eastern location in Cleves/Guelders contradicts this. The vowel *e* may have been analogically introduced into the strong case forms from oblique GEN. DAT. \**bregnes*, \**bregne*.
4. *degel*, *diggel* ‘platen, shard’ (MLG *degel*, *deygel* ‘cauldron’, OHG *tegel*, MHG *tegel*, *tigel*, MoHG *Tiegel*). In literary Early Modern Dutch, there is variation between *deghel* ‘platen’ (1567), ‘cauldron, meltingpot’ (“Saxon and Sicambrian” according to Kiliaan) and *diggel* ‘pottery, shard’ (attested from 1614). No forms in *ei* are attested. The variation between *degel* and *diggel* goes back to Old Dutch: the former results from open syllable lengthening of \**dig-* or \**deg-*, whereas the latter has preserved the short vowel in a closed syllable.

There is no agreement on whether *degel* reflects a Latin loanword or an inherited formation. Since Latin *tegula* was borrowed into West Germanic as \**tigula-* m./n., as shown by Dutch *tegel* ‘tile’ (see below) and German *Ziegel*, and since Dutch *degel* means the same, I favour the view that all of these words reflect Latin *tegula*. The failure of *degel* to adopt the female gender of the Latin word may point to a somewhat later date of borrowing than in the case of *tegel*. Seibold (2011: 917) explains *d-* in MLG *degel* as resulting from “Umsetzung hochdeutscher Formen in niederdeutsche”, but that does not explain the *i*-vocalism nor the geminate *gg* of Dutch. A possible solution is that, either in the donor language (Romance) or in the recipient dialects, Latin *tegula* had a variant \**degula* or \**digula*. There is no evidence for voicing in Gallo-Romance, but the difference in aspiration of obstruents (unaspirated in Gallo-Romance, often aspirated in Germanic) might have caused the incorporation of *t-* as Germanic *d-*. Alternatively, the Latin word may have been connected folk-etymologically with the Germanic verb \**digan* ‘to knead’ (Go. *digan* ‘to model from clay’), since tiles were made of clay. Unfortunately, there is no evidence that the verb survived in Germanic languages other than Gothic.

5. *degen* ‘hero, thane’ < \**pegna-*. Palatalization is first attested in the Old Ghent personal names from around 1000: *Thegenlandus* (829), *Theinardus* (996–1029), *Tegehere*, *Tegenbertus*, *Teingerus* (996–1029). Later we also find *Theinbertus* (12th c.), *Thegenbold* beside *Theinboldus* (12th c.), *Theinardus*, *Deinard* (1120, 13th

c.), *Deinilth* (12th c.), *Theinothus* (12th c.) > *Deynoot*, and *Thegenwalus* (12th c.); see Mansion 1924: 169 and Tavernier-Vereecken 1968: 74f. In the thirteenth century, we find the West Flemish name *Deynen* (GEN.SG.; 1283) versus South Hollandish *Deghen* (Dordrecht, 1286). The Middle Dutch appellative *deg(h)en* ‘thane’, plural *degene*, is found from West Flanders to Cleves/Guelders. It appears that *degen* was the usual form for the appellative in all dialects, whereas *dein-* is restricted to Flemish personal names after 1000. The same distinction appears in Low German, where *Thein-* is first attested in the eleventh century. Whereas the appellative is OS *thegan*, MLG *degen* ‘thane’, the names include *Theganradus* (Werden, 799), *Thegenhard* (Corvey, 1130), *Thegenhard* (Neuenheerse, 1163), *Thegenhardus* (count of Altena, 1183/96), *Thegenradus* (Halberstadt, 1193), *Theinrad* (Helmstedt, 11th c.), see Schlaug 1955: 82.

6. MDu. *deger* ‘thick’ < \**digra-*. It occurs in *tiegere* ‘entirely’ in Cleves/Guelders (1201–25) and as *deg(h)er* ‘completely’ in Hollandish and in eastern Dutch dialects from the fifteenth century onwards. The last Dutch attestations of *deger* are from the seventeenth century but in Low German it survives into the modern dialects. Modern Dutch *degelijk* ‘solid, sound’ is derived from *deger*, as shown by the oldest form *degerlec* ‘entirely’ (WBrab., 1291–1300). The word soon lost its *r*, probably by analogy with the noun *deghe* > *deeg* ‘growth, health’. The suggestion in EWN s.v. *degelijk*, viz. that *degerlijk* with *r* goes back to the feminine genitive of the noun, must be refuted. The southeastern variant *tiegere* points to lengthening of an original \**i*, not \**e*, and this matches the evidence of the other Germanic languages: ON *digr* ADJ. ‘thick’, OFri. ADV. *digere*, *diger*, *deger* ‘precisely, exactly’, Gothic *digrei* ‘fullness’, from PGm. \**digra-* (Kroonen 2013: 95).
7. -*Dei* in personal names < \**daga-* ‘day’. The element *-dei* occurs as a second member in personal names from Zealand and adjacent coastal provinces. The most frequent is *Everdei(us)* with ca. 125 attestations from 1085 onwards, especially from Zealand and Zeeuws Flanders, though it is also sporadically attested in Holland (a late instance is *Jan Everdey*, Hoorn, 1475). Other names containing *-dei* are MDu. *Dockedey* (Ghent, 1315); ODu. *Fikerdey* (1130–61, Benningfort, NH?), MDu. *Fekerdei*, *Vekeldei* (12x, between 1285 and 1512 in Dordrecht and Amstelland; in 1524 *Henricus Fijkerdoy* in Abcoude); MDu. and Early MoDu. *Fockedey* (WFla.), *Foukedei* (Calais, 1298);<sup>55</sup> *Laverdei* (EFla., 15th c.); ODu. *Liefdei* (Ghent, 12th c.); ODu. *Osdei* ‘Ansdag’ (Fla., 11th–12th c.).

55. Since <ou> can stand for /o./ (the dot indicating a half-long vowel) in the Calais documents of the late 13th century, maybe *Foukedei* can be explained from rounding of \**Fefe(r)dei* (compare Calais *van den Wouge* to *weg* ‘road’) rather than from \**Folkdag* as proposed by Gysseling & Bougard 1963: 38.

The same second member is also found with vowel fronting in Low German: Old Saxon *dagus*, -*dac*, beside -*deg*, -*dech* (Schlaug 1962 *passim*, Schlaug 1955 *passim*, Gallée 1993: 45). In fact, the personal names in *dag* seem to have been more widely spread in Low German than in Old Dutch.

8. *dweil* ‘towel’ < PGm. \**þwagilō-* (EWAhd II: 909–11; OIc. *þvegill* m.). Apart from this preform in \**g* there also existed a variant \**þwaxilō-*, which had probably introduced voiceless \**x* from the strong verb \**þwaxan* (thus Schaffner 2001: 413), yielding OHG *dwehila*, MoHG *Zwehle*, MLG *dwēle*, *dweile*. Whereas Low German *dwēle* must contain \**x*, the form *dweile* could also go back to \**g* (see Schaffner 2001: 412). In Middle Dutch, only forms which continue PGm. \**x* are attested. In western dialects it is *dwale*, in eastern dialects mostly *dwele* (f.), see MNW s.v. *dwale*.<sup>56</sup> *Dwaal* remains in use in the written language until the seventeenth century. Forms containing \**g* are only attested after 1500, viz. *dweyl* (Junius, 1567), MoDu. *dweil*. Kiliaan (1599) still views *dweyl* as a Flemish word. Thus, *dweil* is a typical coastal form. The modern West Flemish variant *dwegel* retains, or has restored, *g* (MDu. ptc. *ghedweghen*) and has masculine gender (de Bo 1892: 285). A masculine preform \**þwagila-* could explain the retention of *g* (viz. from the Old Dutch disyllabic NOM.ACC.SG.), and would be an exact cognate of OIc. *þvegill*.
9. MDu. *egede*, *eeghde* ‘harrow’ < \**agipō-* (EWAhd II: 958). Early MDu. *egede* (Limburg, 1240), *egheden* (WBrab., 1275, 1292), *edemakere* ‘harrowmaker’ (EFLa., 1276–1300), toponym *Egt-bamp* (Limburg), Late MDu. PL. *eeghden* (Antwerp, 1330), DAT.SG. *eyde* (Zealand). Kiliaan (1599) has *eeghde* = *egghe* ‘harrow’, the latter word being the precursor of MoDu. *eg*. Modern dialectal *eid(e)* and the derived verb *eiden* are found in Flanders, Zealand, North Holland and Groningen.

Thus, palatalization surfaces relatively late in the sources and is restricted to coastal dialects, including Groningen. East Flemish *ede-makere* is ambiguous: it could reflect \**egede* with intervocalic syncope of *g*, but it might also go back to \**eide* and show the Flemish monophthongization of \**ei* as in *leden* ‘to lead’ < *leiden*. Since *egede* was trisyllabic, regional differences in the preference for syncope (to \**egde*) or apocope (to \**eged*), for which see Marynissen 1995, may lie behind the presence or absence of *ei*.

<sup>56</sup> The entries *dwale* for ‘gausape’ and ‘manutergium’ in the Limburgian *Glossarium Bernense* from 1240 are difficult to derive from \**þwahilō-* because of the apparent lack of *i*-mutation which would be expected to yield *e* in these dialects. Therefore, this *dwale* either goes back to a variant \**þwahlō-* (cf. Got. *þwahl* n. ‘bath, baptism’, OHG *dwahal* ‘bath’) or it has introduced /a:/ from the verb *dwan* /dwa:n/.

10. *echel* ‘leech’ < \**egalō(n)*- (OS *egela*, MLG *egel(e)*, *eyle*, OHG *egala*, MoHG *Egel*, OFri. *il*). The noun occurs in Old Dutch in the toponym *Decchelpule*, *Dekelpole* ‘The Leech Pool’. With gemination of the voiced velar we find Early MDu. *eggele*, *eggle* ‘leech’ (Limburg, 1240), the surname *Egghel* (Bruges, 1295), and the personal name *Egghelin* (WFla., 1297). Late Middle Dutch sources have the plural *echelen* (Hol., 1477) and the compound *watereg(h)el* (*Teuthonista*, 1477). The first forms with palatalization are found in Hollandish *ylen* (1450–70, 1485) and *bloetijl* ‘blood-leech’ (1465–85). Early Modern Dutch has a voiceless fricative in *echel* (in Dodonaeus and other, Hollandish sources), *ecchel*, *acchel* (Kil.) ‘leech’, *ecchel* (Kil.) ‘liver disease with sheep’, but palatalization to /i:/ in *iile* ‘leech’ (attributed to Guelders by Kiliaan), *yle* (Cats, 1618), *yl* (Hexham). Modern dialect forms with palatalization are found in North Holland (*ijl(e)*) and South Holland (*ilan* on Goeree).

The gemination in *eggel*, *echel* arose after syncope of the medial vowel in *egele*. The monophthong /i:/ of Low German and of western Dutch dialects points to a preform \**igle* < \**iglō* < \**igilō* < \**egilō(n)*-, with suffixal \*-il- instead of \*-al-. The suffix change might be due to analogical influence of \**egila-* ‘hedgehog’ on \**egalō(n)*- ‘leech’.

11. *egedis* ‘lizard’ < \**agʷi-pahs(j)ōn*- or \**agʷi-behsōn*- (EWAhd II: 959–61; OHG *egidehsa*, once *ei-* already in the ninth century; MHG *egede hse*, *eide hse*, OS *egithassa*, MLG *egedis se*, *eygdis se*, OE *āðexe*). Relevant variants in Dutch include Early MDu. *egedis se* (Limburg 1240), Late MDu. *egetisse* (Hol. 1450–70), *aftisse* (Gl. Haarl., 1440–50), *hagetissen* PL. (Fla. 1351–1400), \**hectissen* PL. (Brab., 1514). Early Modern Dutch are *haechdisse* (Vorstermanbijbel, 1528) and *egdisse*, *eechdisse* (Plantin, 1573). Kiliaan (1599) gives several variants for ‘lizard’, of which he calls *aketisse* Flemish, which agrees with later evidence (de Bo 1892 has *snaketisse*). He guesses that *heydisse* may be called that way ‘because it lives in uncultivated and arid places’, which is an obvious folk etymology on *heide* ‘heath’. Other variants in Early Modern Dutch are *echdissen* (Oudaan, 1661), *egghediss*’ (de Brune, 1657), *echtissen* (Middelburg, 1623), *egdisse* (*Statenbijbel*, 1688). A modern dialect form with palatalization is South Hollandish *eidas*, also *eindas*.

The coastal Dutch forms in (h)*a*- must be due to folk etymology with *haag* ‘hedge’, and those in *he-* with *heg(ge)* ‘hedge’. The form *aftisse* looks like a hypercorrect Hollandish form of \**agtisse*, since Hollandish often retained *f* which changed to *cht* further east and south. Where the High German instances of *ei-* can easily be explained from *g*-palatalization, the late appearance of *heydisse* and Hol. *eidas* (which has folk etymology with *das* ‘badger’) makes the same assumption uncertain for Dutch. We have to assume that the forms in (h)*ei*- were pronounced but unwritten for several centuries until 1599, or that the change *egC* > *eiC* could still happen in the Early Modern Dutch period.

12. *eget* ‘hedgehog’ < \**egila-*. Early MDu. *igel* (Limburg 1240, 1270–90), *ygel* (EBrab., 1276–1300), *egel*, GEN. *eghels* (WFla., 1287), and the toponym *Eghelsveken* (WBrab.). The usual form in Modern Dutch is *egel*, though Vondel once has *echel* (1617). For the modern dialects, see TNZN 1.10: as far as no heteronyms apply, most dialects have *egel* but Limburgian presupposes *igel*.

The fricative *g* is preserved everywhere. The raising of the stressed vowel to /i:/ in southeastern dialects corresponds to the vowel of the Old Germanic languages and suggests \**i* in the second syllable, as in Limburgian *hiemel* ‘heaven’ < \**ximila-*, etc. (see Goossens 1988: 70–1, FAND II: 60–1). Unlike in *egel* ‘leech’, there are hardly forms with gemination from \**egl-*. The absence of gemination and the absence of *g*-palatalization both suggest that *g* and *l* were not in contact in the relevant period for palatalization, contrary to the case of \**egilō(n)-* ‘leech’. Hence, for ‘hedgehog’ we may assume that the disyllabic West Germanic NOM. ACC. \**egil* determined the outcome.

13. *-ei* versus *-egge*, *-igge* < \*-*igjōn-*. A suffix to derive feminine agent nouns from masculine persons and from verbs. All lexemes with this suffix which occur in the thirteenth century are Flemish, mainly from Bruges and Calais, but also from Ghent and from Maerlant’s *Rijmbijbel*. They have the form *-igghe* with short *i* and geminate /g:/.<sup>57</sup> Examples are *cammighen* ‘female combers’, *kelre wardigghen* ‘cellar keepsters’, *meesterigghen* ‘mistress’, *viscoighhighen* ‘female fishmonger’. The form *-igge* remains typical of Flemish throughout the Middle Dutch period. In the few formations attested outside Flemish, the suffix also takes the shapes *-egge* (in *diefegge* ‘female thief’ and *dwaesegge* ‘female fool’, attested mainly in Holland but also in Groningen and Fryslân) and *-ege* (in *dieveghe*, *dwaeseghe* ‘female fool’, and *loperege* ‘girl on heat’). Suffixal *-ege* is indistinguishable from (inflected forms of) the productive adjectival suffix *-ig*, viz. *-ige* or *-ege*. In the modern standard language, *dievegge* ‘female thief’ is the only surviving noun with this suffix.<sup>58</sup> It ceased to be productive after the sixteenth century outside West Flemish.

The most likely etymology of the suffix is WGm. \*-*agjōn-* or \*-*igjōn-*, but it is only reflected in Dutch and Old English (e.g., OE *scernicge* ‘actress’, *sealticge* ‘dancer’). It seems likely that it was used to build substantivized feminines to the productive adjectival suffix of appurtenance \*-ixa-, \*-iga- (Krahe & Meid 1969: 197). The original formation may therefore have been an *i/jō*-stem, with NOM.SG. \*-*agi*, oblique \*-*agjō-*. This means that *-ege*, with single *g*, could

57. A few forms spell *-ighe* but they alternate with *-igghe* in texts from the same place.

58. Nowadays the suffix is stressed (similar to other feminine formations in *-in*, *-es*), but until Early Modern Dutch the stress resided on the stem.

continue original  $*-igō-$ , the feminine of  $*-iga-$ . This is actually what MNW assumes for *dievegge*, which it explains as original  $*dievige$  ‘the female thievish one’. In contrast, *-igge* and Old English *-icge* could represent  $*-ig-jō-$ . For *-egge*, Schönfeld & van Loey (1970 § 178) suggest that it is a contamination of *-ege* (which they explain from Vulgar Latin *-iga*) with *-igge*. This is possible, but, alternatively, *-egge* might be due to local lowering of unstressed short *i* to *e*.

Now we come to the forms with palatalization. Van Loon (2014: 187) explains *-ei* as the result of palatalization of  $*-eg$  in absolute auslaut, as in the personal names in *-Dei*. Yet in view of Flemish *clappeghe* beside general trisyllabic *klappeye* in the sixteenth century, the change of *g* > *j* seems to have been intervocalic. The evidence is restricted to three lexemes. The highest number of tokens with *-ei* (and *-ay*) is found for Early MoDu. *clappeye*, MoDu. *klappei* ‘garrulous woman’: it is a current word in the sixteenth and seventeenth centuries, and in literary works in Holland until the eighteenth century. Forms with *-g-* are found in (West) Flemish, viz. Everaert *clappeghe* (1523), modern dialects *klappege*, *klappeie* (de Bo 1892). An adjective *klappig*, *klappich* ‘garrulous’ is attested in Plantin (1573) and in some seventeenth-century authors from Flanders and Holland. This may have been the source of *klappei* in Holland.

The second word is MoDu. *labbei* ‘garrulous woman’. It is attested in northern Dutch from the middle of the seventeenth century (*labbey* in Baardt in 1645, *labeyen* in Van Effen in 1732) and is derived from *labben* ‘to talk, chatter’. Since *labbei* means the same as *klappei* but its attestation is much more restricted and starts more than half a century later, it can be argued that *labbei* was modeled on *klappei*.

The third noun is *kladdei* ‘filthy woman’ (after 1800), which is attested so late that it could easily be a recent formation on the model of *klappei*. Still, since the adjective *kladdig* ‘filthy’ is attested from 1600 onward, and only in Hollandish sources, it is conceivable that *kladdei* represents a local development of *kladdig*.

If we are indeed witnessing a change of *-ege* to *-eie* in Flemish (and Hollandish?), the conditioning remains to be explained. After all, the suffix *-ig* is very frequent, and does not normally palatalize its *g*. Maybe the velar fricative was lenited more strongly in suffixal *-ege*, between two unstressed vowels, than elsewhere. The development would then be comparable to prefixal *ge-* > *je-* in Flemish (§ 9.3). It may not be a coincidence that the palatalization has only surfaced in these pejorative, probably low-register, female nouns.

14. *Eiericus* (Ghent, 12th c., early 13th c.) = *Egericus* (Ghent, 12th c.) and (H)eggerik. The first member contains PGm.  $*agjō-$  ‘edge of a sword’ (OS *eggia*, OE *ecg*, MDu. (*h*)*egge*, *ecke*, MoHG *Ecke*). Whereas the name (H)eggerik shows the *j*-gemination of the simplex *egge* <  $*agjō-$ , *Egericus* and *Eiericus* presuppose a

- first member *\*agī-* which continues the original Proto-Germanic nominative singular in *-ī* of the *i/jō*-stems.<sup>59</sup> For *Eiericus*, Tavernier-Vereecken (1968: 587) assumes that *i* represents a palatal spirant, not a palatal glide.
15. *Eil-* < *\*agila-* in names from East Flanders: ODu. *Eilbertus*, *Eilboldus*, *Eibodo*, *Eilfridus*, *Eilolfus* (all from Ghent, 11th c.). The adjective *\*agila-* does not survive as a simplex in Dutch. In Old Saxon, *Eibold* first appears in the Werden documents in 816/817 (Blok 1960, nr. 34 = xxxviii), also in Essen, and later in Xanten. The Old Germanic names suggest a preform *\*agila-*, cf. Förstemann 1900: 27–36, but the etymology is uncertain. Proto-Germanic *\*agla-* ‘painful’ or *\*aglu-* ‘difficult’ (Kroonen 2013: 4–5) are no good semantic matches, and would not normally have yielded a first member *Agil-* but *\*Agal-*. Possibly, *\*agila-* was derived from *\*agan-* ‘to fear’, in the sense of ‘fearful’.
  16. *eisen*, *ijzen* ‘to be afraid’ < *\*agisōn-*. In Old Dutch, the verb is not attested but the noun (*\*agis-an-*) and adjective (*\*agis-lik-*) are. The Wachtendonck Psalter (10th c.) retains *g* in all cases except one: NOM. *egiso* ‘fear’, GEN. *egesin*, ADV. *egisliko* ‘terrible’ (all in glosses to the WPs.), GEN.SG. *egislikes* (WPs. 65.05), but *so eiselika thing* (WPs. 65.03). In the Middle Franconian Rhyming Bible (1150–1200), one form retains *egis-* and another one has palatalization to *eis-*: NOM.PL. *égisliche* but NOM.SG.m. *eislich*. Finally, the Leiden Willeram has NOM. SG.F. *egeslich* (3x). In Early Middle Dutch, the noun has disappeared. The verb is always found with palatalization: *eisen* ‘to be afraid’ (Limburg, 1240), *eysen* (EBrab., 1276–1300), *eysde* (WFla., 1285). Similarly *ei-* in *eyselike* and other derivatives. After 1500, the verb is mostly spelled as *ijs/zen*. There are no traces of *g* in Middle or Modern Dutch.
  17. *ekster* ‘magpie’ < *\*agistrjōn-* f. (see van Wijk 1914: 214–5 for the reconstruction). The closest cognates are OS *agastria*, *agistra*, MLG *egester*, OHG *agistra*, *agestra*, MHG *ageraster*, *agrest*, *egerst*. In High German dialects, these forms are continued in Alemannic *ägerst(e)*, cf. EWAhd I: 85f. The basic noun was OHG *aga*, OE *agu* < *\*agō-* ‘magpie’. Many of the German forms with an *l*-suffix also display palatalization of *g*: OHG *agalstra*, MHG *ailster*, *eigelstere*, MLG *elster* (< *\*eilster* < *\*agil-*), MoHG *Elster* < *\*aglistrjōn-* (EWAhd I: 72f., 79f., Eickmans 1986: 171–3).

Dutch has no forms with a palatalized reflex of *\*g*. Early MDu. *egestre* (Limburg 1240) reflects *\*agi-*. *Hicstre* ‘jay’ in the same vocabulary has taken analogical *h-* from putative *\*heher* (OE *higora*, MHG *heher*, MoHG *Häher* ‘jay,

59. Cf. Bammesberger 1990: 100–102, Ringe 2006: 269. Other onomastic evidence for the erstwhile suffix variation between *-ī-* and *-jō-* in compound names includes OHG *Eggihart* beside *Eghart*, *Sunnihilt* beside *Suniperht* (\**sunjō-* ‘truth’), and *Brunnihilt* beside *Brunnihilt* (\**brunjō-* ‘breastplate’), cf. Braune & Reiffenstein 2004 § 62.

magpie'), and its *i* may be due to analogy with another word (*hicken* 'to peck'?); cf. Westphalian *hiakster* (Sarauw 1921: 391), MLG *hegester*. The western forms with /a:/, such as *aecstren* GEN.SG. (WFla., 1287), *aestre* (Flanders, 1390–1400), *aexter* (Holland, 14th c.), have no *i*-mutation. They go back to a preform with \**a* in the second syllable or are based on the simplex \**agō-*. The forms from Late Middle Dutch and Modern Dutch generally confirm the distinction between western *a(a)* and eastern *e(e)*, with this stipulation that the *e*-form was also native to Brabant. As *ekster*, it has become the literary standard. In modern dialects, *aakster* and variants are frequent in West Flanders and northern East Flanders, *ekster* in southern East Flanders and Zeeuws Flanders (WVD III.126). Other dialect forms are *èèster* in eastern Limburgian, *egerst* in central Limburgian, and *aster* in Groningen.

18. *Fegernodus* (Ghent, 948, 11th c., 12th c.); *Vegericus* (Ghent, 11th c.), *Vegericus* (1098), *Veieric* (1306–07), *Feyerick* (modern family name, Ghent). The first member contains the adjective \**fagra-* (OHG *fagar*, OS *fagar*, MoE *fair* 'beautiful'). The raised reflex *e* from \**a* in the first syllable is irregular in Dutch, and might point to Inguaeonic speech according Mansion (1924: 116). The rare change of intervocalic *g* to (still intervocalic) *j* in *Veieric*, *Feyerick* may be linked to this coastal Dutch phenomenon.
19. *Frigelingehem* (966), later *Frilingim* (Ghent, 11th c.), see Mansion 1924: 28, 269. The toponym is possibly identical to the first element in modern *Vrijlegem-hoek* in West Flanders. *Fri-* /fri:-/ would then show a change of \**igi/e* to *i* in the eleventh century.
20. *heinen* 'to fence' < \**hegenen* < \**xaginōn-* and *hegen* 'to fence' < \**xagōn-*. The reflexes of the latter verb always have *g* in Dutch. MDu. *heghen* 'to fence' and derivatives are found in northeastern Dutch. In the Early Modern period, *heghen* 'to protect, guard' also turns up in Flanders, Holland, and Zealand, while Kiliaan (1599) has *verhegen* 'to improve', as do modern eastern dialects of Twente and Achterhoek. Compare MLG *heghen*, the usual form, but *heynen* 'to defend' in a charter from 1345 from Oldenburg.

The reflexes of \**xaginōn-* fall into two categories. Brabant and Flanders favour *g*, witness *heghenen* 'to furnish, clean, decorate' (Kiliaan; de Brune), *vereghenen* 'to tidy up' (Bruges), *beheghenen* 'to harm' (Everaert, Bruges), *on-theghenen* (van Ghistele, Antwerp). Guide Gezelle (WFla., 19th c.) has *afheghenen* 'to stake out'. The meaning 'tidy up' is related to 'fence off'. Holland and Zealand show palatalized reflexes of the verb in the meaning 'to fence', compare MDu. *heinen* (Delft, 1299), *beheijnen* (Gouda, ca. 1340; Goudriaan et al. 2000: 25), *heyninge* 'fence' (various places), Kiliaan *heyninck* 'fence'. In the seventeenth century we find the verbs *omheinen* and *beheynen* in texts from the same region.

The difference between Flemish *hegenen* and Hollandish *heinen* is conspicuous. It could be due to different patterns of syncope, but it goes against the usual geographic relationship as seen in Hollandish *regen* vs. Flemish *rein* ‘rain’. Possibly, *g* in *hegenen* could be restored on the model of *hegen*, where the context for palatalization was not given.

21. *jegen(s)* ‘against’ < \**gagin*, \**gagna/i*. See § 9.1.2 above for the attestations and the reflexes of initial \**g*. In Old Dutch, the word-internal *g* is retained throughout. The same goes for all appellatives in thirteenth-century Dutch. An exception occurs among the Flemish names attested in French documents from Calais from 1296 and 1298, where three persons have the family name *Ghei(n)mar* (Gysseling & Bougard 1963: 39). The editors explain the name as \**Gagin-mār*, with the element \**gagin-* as also found in some other Old Germanic names (Förstemann 1900: 564f.). If this etymology is correct, we might explain the palatalization as a case of *gn* > *jn* in a polysyllabic word (cf. the names in *Mein-* and *Rein-* discussed below), whereas *g* stayed in disyllabic *gegen* and in *jegen*.

In the Wachtendonck Psalter, ODU. *geginwirdi* ‘conspectus’ is usually attested as *geginuuirdi* or *gegenuuirdi*. The deviant forms *gaienuuerde* and *gainuueierde* in glosses to Psalms 5.9 and 9.26 are interpreted by de Grauwé 1979–82 I: 171–3 as Middle Franconian forms left from the *Vorlage* of the text. In view of the frequent absence of *i*-mutation in the OHG forms of this noun (*gagenwerti*, *gaginwurti*, etc., see the attestations in de Grauwé, loc.cit.), this seems the most likely solution.

22. *kegel* ‘cone, skittle’ < \**kagila-*. This noun is always attested with preserved *g*. In Old Dutch, there are five instances of a personal name *Kegel*, *Keghel* (EFla., 12th c.), while in the thirteenth century, *keghel* is attested in South Holland, East Flanders and West Brabant. Kilian (1599) mentions *keghel* as ‘cone, post, etc.’, and another word *keghel* as an antiquated Hollandish word for ‘boulder’ and as a Flemish variant for ‘icicle’. We find *kegel* in all of Modern Dutch. See nr. 24 *keilen* for the derived verb.
23. *kei* ‘stone, boulder’ < \**kagi*. The presence of \**g* in West Germanic is established by the cognate noun *kegge* ‘wedge’ (Early MDu. NOM.SG. *kighe*, GEN. SG. [s]ceggen) from \**kagjō-*, and by the fact that *kegel* < \**kagila-* means both ‘cone’ and ‘boulder’ and can formally be a derivative of \**kagi*. *Kei* and *kegge* can go back to a Proto-Germanic *i/jō*-stem with NOM. \**kagī*, GEN. \**kagjōs*. In Dutch, all forms of \**kagi* have palatalized *g* to *j*, probably yielding \**kegi* or \**kege* and then *keie*. The oldest form is the toponym *Keidyc* (Fla., 1153). Next, it occurs in the names *Paulus Keyacker* ‘stone-field’ (1272), *Hanninus Keie* (1281; Debrabandere 2003), and in the appellative *keyen* PL. (Brab., 14th c.). Early Modern Dutch has *keye*, Modern Dutch *kei(e)*.

24. *keilen* ‘throw’ < \**kagilōn-*. The oldest meaning is ‘to play a game (of skittles)’, which shows that the verb was derived from *kegel* ‘cone, skittle’: MDu. *keylen* ‘a certain game’ and *keylbane* ‘skittle alley, bowling alley’ in the Statutes of Leiden, *keegelen* of *keylen* ‘to bowl’ (Utrecht, 1640). The more general meaning ‘to throw’ surfaces in the seventeenth century. Most or all Early Modern attestations of this verb are from the coastal provinces, and nearly all show palatalization.
25. *kregel* ‘touchy, prickly’ < \**krigila-* ‘stubborn’ (see Kroonen 2013: 304 for the original meaning of the verb \**krīgan* ‘to be stubborn’), cognate with MLG *crighel*, *kregel* ‘alert, mobile’. Early MDu. *krigel* (WBrab., 1265) with /i/ or /i:/, Late MDu. *eincregel* (*Teuthonista*, 1477), Early MoDu. *krijghel* ‘touchy’ (Kiliaan, 1599; with introduction of the vowel of the verb *krijgen*), *kregel* (Coster, 1619). Modern *kregel* is mainly found in northern Dutch sources but also in Flemish and Brabantish. No palatalization is ever attested in this adjective in Dutch.
26. *leger* ‘lair, army’ < \**legra-*. The noun may be hidden in the Old Dutch toponym *Legurlo* (Veluwe, 855 copy 891–910). Middle Dutch *legher* can mean ‘position’ (e.g., *te lants leghere* ‘as long as the land lies’), and then ‘lair, army camp, army’, which is the meaning of MoDu. *leger*. No palatalization attested.
27. *leggen* ‘to lay’ < WGm. \**lagjan-*. Due to *j*-gemination, *gg* arose in the infinitive, the 1SG., 1PL. and 3PL. present indicative, and in the present subjunctive. Thus, in order to determine the extent of *g*-palatalization in this verb we must study the 2SG., 3SG. and 2PL. present, the preterite, and the past participle. The survey will be restricted to the Old and Early Middle Dutch periods, since paradigmatic leveling renders the original situation opaque in later centuries. In Old Dutch, the present is only attested in the 2PL. imperative *umbeleged* ‘put around’ and *underleged* ‘put below’ in the Leiden Willeram. The preterite occurs as 3SG. *legede*, 3PL. *legete* in the Middle Franconian Rhyming Bible, and the participle as *geleget* in the LW. Thus, *g* is preserved everywhere, and in all these forms it is in intervocalic position.

There is more variation in the Early Middle Dutch period. Table 17 provides a survey of the attested forms. It shows that *g* is preserved in the two forms which occur of the 2SG. pres., and in all 3SG. and 2PL. pres. forms, with the exception of once *leit* ‘lays’ and once *leidi* ‘lays he’ in the works of Van Maerlant, who wrote in West Flemish. In the preterite, however, all dialects show *ei* except for the southeastern area, which has *leged(e)* and *belachten*, found in literary sources (*Tristant* and *Moraalboek*; *belachten* once in the Aiol fragments). In the participle, there is more variation: *g* is generally preserved Holland and Brabant, and partly in Cleves/Guelders and in West Flanders, but palatalization to *ei* is found in most of the Flemish forms, including one from Zealand, and in Cleves/Guelders.

This distribution gives the impression that *g* was generally retained when it was followed by a vowel in Old Dutch, viz. in the present inflection and in (many forms of) the participle. The nearly exceptionless palatalization in the preterite would seem to contradict this assumption, since the Cleves/Guelders forms show a vowel after *g*. Yet a different treatment of the preterite from the present and the participle would correspond with a similar split in the data for Old Saxon *leggian*. In Old Saxon, we find a suffixless preterite *lagda*, *lagdun*, once *legda*, in ms. C of the Heliand, and *legda*, once *ledda*, in ms. M; the participle is generally *gilegid* (Gallée 1993: 263). We can hypothesize that *lei-* in the Dutch preterite matches the absence of a suffix vowel in the Old Saxon preterite (ending *-da*, not *-ida*), whereas the retention of *g* in the Early Middle Dutch participle (partly) and the 3SG.PRES. (generally) would correspond with the presence of a vowel between *g* and *t/d* in Old Saxon. In the past participle, the variation between *eg* and *ei* may be explained by the existence of paradigmatic alternations which depended on the exact form of the ending, that is, preservation of *g* in \**ga-lagid* but palatalization in \**ga-lagd-* (cf. Gallée 1993: 251). In short, the variation in Early Middle Dutch could be the result of paradigmatic alternation between unsyncopated (> *geleged*) and syncopated (> *geleid*) preforms. As we will see below, a comparable situation pertains to *zeggen* ‘to say’.

The West Flemish forms *leit* ‘he lays’ from the late thirteenth century might foreshadow the levelling taking place in the following centuries (van Bree 1969). But since one of the three attested forms is *leidi* ‘lays he’, with the enclitic personal pronoun attached to the verb, one could also explain *leit* as having arisen in trisyllabic combinations of verb plus enclitic pronoun, with syncope of the middle vowel followed by palatalization of *g*: \**liget* \**hi* ‘lies-he’ > \**leget-i* > \**leg’ti* > *leiti*. In that case, the development to *leit/d-i* would be comparable with that of the participle *geleit*.

28. *liggen* ‘to lie’ < WGm. \**legjan-* << PGm. \**leg-i-* (Kortlandt 1990: 8). In view of the strong preterite and participle, only the present sg. forms \**ligis* and \**ligib* (OS *lidid* ‘lies’) and 2PL. \**ligib* are relevant for our investigation. Since the verbs *leggen* and *liggen* have often influenced each other or even merged, it seems advisable to restrict the initial investigation to the same period as with *liggen*, that is, to Old and Early Middle Dutch. Unfortunately, the 2SG. and 2PL. are not attested before 1300, which leaves only the 3SG. Mooijaart (1992: 188) discusses the forms ‘lays’ and ‘lies’ together, because in principle they have the same etymological form: *du leges, hi leget*. But although her decision can be defended on graphemic grounds, the present paradigms of both verbs did not completely overlap in all dialects (the stem vowel was different, \**ä* vs. \**e*) and their preterite and past participle remained completely distinct. Therefore, the inner-paradigmatic analogies affecting *leggen* and *liggen* may have been quite different, which justifies a separate discussion of both verbs.

**Table 17.** The 13th-century forms of *leggen* (incl. compound verbs) as per CG. The numbers refer to the tokens attested in the corpus

	2SG.PRES.	3SG.PRESENT	2PL.PRES., IPT.	preterite	participle
WFla.	–	leget 5	–	leide, -leiden	g(h)eleg(h)et 7
		leghet 35		passim	yleghet 1
		leegt 1		leedde 1	ghelecht 1
		legt 1		lede 2	gheleit/d 32
		leec- 1		leden 1	beleit 1
		leit 2, leidi ‘lays he’ 1			ghelet 1
EFla.	–	leghet 1	leegt 1	leide 5	gheleit 4
		leeght 4		leiden 2	geleid 1
				leedde 1	gheleed 1
WBrab.	legs 1	leget 1	legt 4 legget 2	leide	geleget 12
		oplegt 1		leiden	g(h)elegt 20
		leeght 7		passim	gheleit 1
		leeeght 1			
EBrab.	–	–	–	leide passim	geleght 1
NBrab.	–	–	–	–	gheleghet 4
Cleves/ Guelders	leges 1	–	lechet 1	belachten 1 oplegede 1 legede 2 leged ic 1	gelagt 1 geleget 1 gelegt 2 geleit/d 3
Holland	–	leghet 1 leeght 1	–	leide 2 leyden 1	gheleghet 5 vte ghileghet 1 verleghet 1
Zealand	–	–	–	–	vtgheleit 1

In Old Dutch, the Leiden Willeram has the forms *ligad*, *lighet*, *liget* (all once) ‘lies’ and *analigat* ‘concerns’. Table 18 shows the distribution of forms in Early Middle Dutch. The oldest form in Flanders, Brabant, Zealand and Holland is clearly *leg(h)et* with an open syllable; syncope leads to *leeght*, *leecht* and other variants. As Mooijaart notes, syncope is more frequent in East Flanders and Brabant, though it is also found elsewhere. In Limburg, the stressed vowel is usually *i* rather than *e*, and the form <cligt> can in principle have a long vowel or a short one (in the latter case, it could have adopted it from the infinitive and 1SG., 1PL., 3PL., or it escaped open syllable lengthening). In some forms, e.g. *leet* in West Brabant, *g* may have been syncopated (van Loey 1976: 105). Forms with a short vowel (*legghet*) show the influence of the 1SG. and 13PL. forms with gemination.

**Table 18.** The 13th-century forms of *ligt* ‘lies’ as per CG. The numbers refer to the tokens attested in the corpus

	3SG. PRES. with <i>g</i> or <i>ch</i>	3SG. PRES. without <i>g</i> or <i>ch</i>
WFla.	<i>leget</i> 14, <i>leghet</i> 445, <i>gheleghet</i> 1 <i>leeght</i> 3, <i>leecht</i> 2 <i>legghet</i> 1, <i>lecg(h)et</i> 1, <i>legt</i> 21, <i>leght</i> 6 <i>leighet</i> 1, <i>leicht</i> 2, <i>leight</i> 1 <i>licht</i> 2, <i>lich</i> 2, <i>lig</i> 1	<i>leit</i> 23, <i>leet</i> 1
EFla.	<i>leget</i> 17, <i>leghet</i> 249 <i>leeght</i> 8, <i>leecht</i> 10, <i>leegd</i> 2 <i>legghet</i> 15 <i>leg(h)t</i> 25, <i>length</i> 2, <i>lecht</i> 5, <i>lecgd</i> 1	<i>leid</i> 5 (Oudenaerde), <i>leit</i> 97 (67 in Oudenaerde, 19 in Petegem, 1 in Geraardsbergen)
WBrab.	<i>geleget</i> 12 <i>leeght</i> 4, <i>leecht</i> 8 <i>legt</i> 16, <i>leg(h)t</i> 5, <i>gelegt</i> 2	<i>leiet</i> (Dilbeek 1296) <i>leit</i> 3 <i>leet</i> 3 (St-Genesius-Rode)
EBrab.	<i>leg(h)t</i> 5, <i>geleght</i> 1	<i>leit</i> 2 (Leefdaal)
NBrab.	<i>legt</i> 4	<i>leit</i> 2
Limburg	<i>leget</i> 1, <i>legt</i> 1, <i>ligit</i> 4 <i>ligt</i> 398, <i>light</i> 1, <i>liech</i> 2	<i>leit</i> 1, <i>leid</i> 1
Cleves/Guelders	<i>legit</i> 1, <i>ligit</i> 1, <i>leig</i> 1	
Holland	<i>leeght</i> 1, <i>legghet</i> 1, <i>leght</i> 1	<i>leit</i> 2
Zealand	<i>leghet</i> 3, <i>leghd</i> 1	

The form *leit* is a (small) minority form everywhere, except for the East Flemish town of Oudenaerde. Here, *leit* is much more frequent than *leghet*, *leecht*. Nearly all these verb forms occur in the document CG nr. 1040 which collects the rents of the hospital of Oudenaerde. It is dated to 1291 but not all entries are from the same date or hand. The forms occurring in CG 1040 are *leit* (several dozens), *leid* (5x in one document) *leget* 2x, *legghet* 2x, *leecht* 4x, *leeght* 1x. The last two forms are in entries actually belonging to the fourteenth century. Thus, *leit* may belong to the dialect of one or more specific scribes.

Van Loey (1980: 58) assumes that the forms in *-ei-* have resulted from a development of *ege* > *ei*, but this is contradicted by the outcome *ege* > *ēge* > *leget*, *leecht*; note that both forms (with *ei* and with *g/ch*) can be found in the same places. In CRM14, 3s. *leit* ‘lies’ gains in relative frequency and is found in all regions of Dutch (beside *leghet*, which is found, e.g., in Groningen, Holland, Utrecht, Brabant, Zealand, Flanders and Limburg, and *leeg(h)t* in Brabant). The fact that 13th-century *leit* is found in all major dialects, but everywhere as a minority form, could suggest the following solution. Regular ODu. *liget*

became early western and central MDu. *leget* > *leegt*. With inverted word order, and with a pronoun attached in enclitic position, syncope in a trisyllabic form would apply, hence \**liget* \**hi* > *leget-i* > *leg'ti* ‘he lies’. In the latter form, the development to *leit-i* in Late Old Dutch would be comparable with the participle of ‘to lay’. The variant *leit* would then have been generalized in the fourteenth century from inverted clauses.

29. *Leie* ‘Lys’, river name in Flanders. The oldest attested form is *Legia* (694 copy 941 to 11th c.), which is followed up by *Leia* (821 copy 941 to 1223), *Leie* (838 copy 941) and by the Romance outcome *Lis*, *Lisia*, *Lisa* (11th c.) which confirms an original sequence \**gj*. Early MDu. *Leie* is attested as *leye* or *leie*, twice as *loye*, in West and East Flemish.

Usually, PGm. \**gj* develops into a geminate \**ggj* and then becomes Dutch *gg*, as in MDu. *brugge* < \**brugjō-* ‘bridge’. This suggests that *Legia* > *Leia* did not contain consonantal \**j* but vocalic [i], due to a date of borrowing of this hydronym after the rise of PGm. \**gj* or possibly to the influence of a paradigmatic variant \**legī* in an original *ī/jō*-stem.

30. *meid* ‘young woman, maiden, maid’ < \**magabi-*. Old Dutch *magath*, *magathe* (DAT.SG., LW) and *maget* (NOM. and DAT.SG., MRB) retain *g*. The same is true for thirteenth-century Dutch, where the southeastern dialects show *i*-mutation of the stressed vowel to *e(e)*, viz. in DAT.PL. *meeghden*, *meghden* (EBrab.), whereas all other dialects retain unmutated *a(a)*, viz. in *maghet*, *maghede*, *magt*, *maeght*, PL. *magheden*, in *magit* (Cleves/Guelders), and in the diminutives *magediin*, *magedine* (WBrab.), *maghedekin* (WFla.). The few Early Middle Dutch attestations from Holland and Zealand also have no *i*-mutation: *magheden* (PL.; 2x Kloosterzande in Zealand, 6x Holl.), *maghet* (2x EHoll.), *maghen* (2x Dordrecht). The evidence from CG also shows that syncope of the second vowel was spreading in the thirteenth century. Similarly, \**maga/id-dōm* ‘maidenhood’ results in *magitum* (Cleves/Guelders, 1201–25), *magedum* (Limburg, 1240), and with syncope in *maeghdomlec* ‘maidenly’ (EBrab.).

In Late Middle Dutch, forms with *ei* surface in northern coastal Dutch dialects: *meyt* (Delft, 1488), *eenen cleenen meytken* (DAT.; Holl.). In 1599, Kiliaan attributes *meyd* to Friesland, Guelders and Holland; *meyt* is further found in *Utrechts Placaatboek* (1571), and in the Hollandish literature of the seventeenth century (even as *mayt* in Hooft). The time and regions where *maghet* and *meid* first appear imply that, in spite of the form *magit* in the southeastern romance *Floyris ende Blantseflur* (1201–25), Dutch *meid* does not reflect \**agi-* > \**egi-* > \**oji-* > *-ei-* as held by Schönfeld & van Loey 1970: 77 and EWN. In fact, the second syllable contained *a* in western Old Dutch. Rather, *meid* developed in or around Holland from \**magd-* which had arisen in polysyllabic forms such

as the oblique singular and the plural paradigm. The rise of *ei* presupposes syncope of schwa in such forms. It is striking that *ei* only appears at the very end of the Middle Dutch period. In contrast, *ei* appears much earlier and geographically more widespread in *meisen* and *meisje*, to which we turn now.

31. *meisen* ‘young girl’. The diphthong is found from the earliest attestations onwards, and the spellings with <c> in 1236 and with occasional <ss> in later texts point to voiceless /s/: *meicin*, *meisin* (Ghent, 1236), *meisijn* (EFla., 1290), *een maysen kint* (1315). Early MoDu. *meyssen* is found quite generally in Holland, Zealand and Flanders, but also in Brabant (Lindemans 1954: 265); Kiliaan has *meydsen*, *meyssen*. Voiceless s suggests a preform \**meid-sin* > *meissin*. All early forms stem from coastal Dutch, where we also first find g-palatalization in the simplex *meid* in the fifteenth century (see nr. 30 above). Thus, *meissin* goes back to \**meidsin* < \**magdsin-* < \**magad-sīn-* (Lindemans 1954: 264, Schönfeld & van Loey 1970: 228). The length of the derivative explains why syncope and hence g-palatalization affected this word a few centuries before the simplex *meid*.

The diphthong *ei* develops via *ai* into *aa* in several modern dialects. An early example is *maasen*, pl. *maasens* (Biestkens, *De Klucht van Claes Kloet*, 1619) in Amsterdam. In South Brabant, the diminutive *masken* (first attestation: *maesken* 1766, Brussels) is widespread in the twentieth century. According to Lindemans 1954: 265f., *meisen* > *masen* arose in Brussels, at the earliest around 1600, and *masken* is its local diminutive. From there it spread to the surrounding area.

32. *meiskin*, *meisje* ‘little girl’. Early MDu. *meiskin* and *meisken* in West Flemish, and *meiskijn* also occurs in other Hollandish and Flemish sources before 1500. The complete absence of forms in *d* makes the etymology \**magid-sīn-* (Lindemans 1954: 264) unlikely, even though it cannot be completely excluded. Since suffixation of *-kijn* is regular after words ending in *s*, *meis-kijn* could be a conscious remake on the basis of *meisin*, after \**meidsin* > *meissin* had become morphologically opaque in Middle Dutch when *-sin* died out as a diminutive suffix.

The form *meisken* is still quite general in all of southern Early Modern Dutch; later it was replaced by *meisje* on the basis of Hollandish. In Holland, *meisje* makes its first appearance in 1600. It may be due to a replacement of the suffix *-ke* by the productive diminutive *-je*, or it may have arisen as a backformation to *meissen*, *maassen*, which looked like plural forms to a singular \**meis*, \**maas*. The presence of *d* in Kiliaan’s *meyd-sken* is problematic in that *-sken* is normally only added to velar-final stems; from *meid*, the regular southern Dutch diminutive would be *meidje*. Hence, *meydsken* looks like a remake of earlier MDu. *meisken*.

33. *Mein-* in personal names < \**magina-* ‘force, power’. Examples from the Old Ghent documents are *Meinburg* (11th c.+), *Meingaudus* (994, Tournai), *Meinger* (941–55), *Meinardus* (11th c.+), *Meinnelda* (1234–35), *Meinsendis* (early 12th c.), *Megesuindis* (1108–18) beside *Meinswindis* (11th c.), *Meinoldus* (12th c.), *Meinzo* (11th c.+); cf. Tavernier-Vereecken 1968. In Old Saxon, *Mein-* for earlier *Megin-* is attested from the early ninth century onwards, cf. Schlaug 1962: 131–3. Spellings with *g* still occur in the oldest Werden charters (e.g. *Meginleuus* 797, *Meginulfus* 799) and in some other documents, but must soon have become an archaizing feature (Schlaug 1955: 127).
34. *peil* ‘level’ < \**pagila-*. From this noun was derived a verb *peilen* ‘to measure’. In Middle and Early Modern Dutch, there is a clear geographic distinction between palatalization in coastal dialects and the retention of *g* in Brabant and eastern dialects. For instance, we find MDu. *peil*, *ghepeilen* ‘to measure’, *wijn-peylder* ‘who measures the wine’ in Holland, Early MoDu. *peylen* ‘to measure’, *peyl* ‘measure, level’ in Holland, and *peyl* ‘task’, *peylen* ‘to give a task’ in Flanders. We have *peil(en) passim* in Hollandish sources from the seventeenth century on, but MDu. *pegel*, Kiliaan *peghel* ‘measure, level’, also ‘pint’ in Saxon and Guelrish, as well as *peghelen* ‘to measure’ and *pegheler* ‘who measures’. In the modern standard, *peil* ‘level’ and *pegel* ‘level mark’ coexist with semantic differentiation.
35. *Pendrecht* < *Pagin-drecht*. A toponym in South Holland (now a part of Rotterdam), attested as ODu. *Paindrech* (1105–20 copy ca. 1420), *Pahindrecht* (1114–20), *Pagindrecht*, *Paindrecd* (1167), *Paindreht* (1169), *Peydreh* (1199); MDu. *Paindrecht* (1313, 1323, 1329) beside *Peendrecht* (1324) in the count’s administration of Holland.

The first member may be identical with MLG and eastern MDu. *page* ‘horse’, an *n*-stem (van Berkel & Samplonius 2006: 361), in which case this is the most westerly attestation of that noun. The twelfth-century attestations suggest original \**Pagin-dreht* which developed into *Paindreht* (assuming *h* in *Pahindrecht* to be a hiatus) and unattested \**Peindrecht*. The name then either lost or did not spell the nasal (*Peydreh*) or monophthongized the diphthong and shortened it before the consonant cluster (*Peendrecht* > *Pendrecht*).

- 36a. *regel* f. ‘rule, line’ < \**regulō-* from Lat. *rēgula* (OHG *regula*, *regile*, MoHG *Regel*, OE *regol*). Early MDu. *regle* (Limburg, 1240), *regele* ‘ruler; regimen, canon’, in Late Middle Dutch usually *regel(e)* but also *regule*.
- 36b. Late MDu. *reggele* ‘row’.
- 36c. Late MDu. *righelen* (Ghent, 1380) ‘cross-bars’, *rigelen* (northeastern Dutch) ‘shelves’. Early MoDu. *rijcghel*, *rijghel*, variant *richel* (Kiliaan, 1573, 1599), *rychelen* (PL; 1688), StDu. *richel* ‘ledge’; also *verrigelen* ‘to tax’ (16th c., North Holland).

The three variants a, b and c are given according to the different stressed vowels in Middle Dutch, viz. /e/, /ɛ/ and /i/. There is some uncertainty in the dictionaries about whether all these words go back to Latin *regula* ‘rule’, and by which path. Some variants have been claimed to reflect a separate Proto-Germanic word \**rigala-* which partly merged with *regula*. I follow the reasoning of Franck & van Wijk (1912 s.v. *regel*) and of EWN, viz. that all the attested meanings can be derived from Latin *regula* and that there is no need to assume two different etyma. The semantic differentiation between ‘rule’, ‘row’, ‘shelves’, etc. can be understood on the basis of the explanation put forward by Franck & van Wijk.

Thus, 36a *regel* probably shows the effect of the learned word *regula* which caused the restoration of *g* at several moments in history. The form 36b *reggele* must have arisen from \**regle* by means of fortition of *g* before *l*, and thus stands very close to the form of 36a. In 36c, the long *i* of *righel* can be explained from Latin ē having been adopted as *i* by the Germanic vowel system. This adoption is typical of the earliest layer of Latin loanwords with ē, such as Dutch *krijt* ‘chalk’ and *ijken* ‘to check’: at that period, there was no other long vowel phoneme corresponding to Latin ē. Syncope in trisyllabic forms would have yielded \**rīglen* in Late Old Dutch, whence with fricative fortition *rīchel* and, with concomitant vowel shortening before the cluster /xl/, the variant *richel* / *rixel*. One could alternatively explain *richel* from an original short \**i* in \**rigulō-*, as in the case of *tichel* ‘tile’ < \**tigulō-* < Lat. *tegula*, but contrary to what is found for ‘tile’, there are no early Eastern Dutch attestations of /i/ in the first syllable (though compare OHG *rigil*, MoHG *Riegel* < \**rigila-*). The western location of the attestations of *richel*, and the fact that they do not appear before Kiliaan, suggest that they go back to earlier \**rigl-*.

No forms in *reil(-)* are attested; WFle. *reile* ‘lath’ is regarded as a loanword from French *reille* by WNT.

37. *regen, rein* ‘rain’ < \**regna-*, *regenen* ‘to rain’ < \**regnōn-* or \**regnjan-*. Old Dutch has *regan* (NOM.SG., WPs. and LW) and *regin* (ACC.SG., WPs.). In Early Middle Dutch, *g* is retained in southern and eastern dialects: *reg(h)en* (Limburg, Cleves/Guelders, Brabant, EFla.), *regenwater* (Limburg, 1240), and in the verb *regenen/reggenen* (from Limburg to East Flanders). West Flemish sources from the thirteenth century vacillate between *eg* and *ei*. In the verb, *rein-* (12x) is the only attested form. In the noun, *rein-* occurs in the genitive and dative singular (*reins, reine*) and also in fifty percent of the NOM.ACC. forms (*rein* 8x) and in the compound *reinwater* (3x), as against *reghen* (7x), *reghene* (1x), and *reghenboghen* ‘rainbow’. A possible interpretation of this variation is that the disyllabic form *regen* remained unchanged, whereas polysyllabic forms such as GEN.SG. \**regenes*, 3SG.PRES. \**regenet*, PRET. \**regenede* underwent syncope and *egn* became *ein*. We also find *rein, reen* in Late Middle Flemish, and Kiliaan (1599) ascribes *reyn* and the verb *reynen* to Flanders and Guelders.

38. *Reinhard, Reinaert* < \**ragin-hard-*. The noun \**ragin-* ‘counsel, decision; fate’ occurs very frequently as the first element of personal names. Whereas *g* is always found palatalized in *Reinhard*, some of the other Old Dutch names preserve *g* in old attestations, for instance *Regenbaldus* (12th c.) beside *Reinboldus* (1034–58; 12th c.), *Reiboldi* (1201–50); *Regenfridus* (838) beside *Reinfridus* (996–1029), *Reynfridus* (1124), *Reinfridus* (1162), etc. (from the 11th c.); *Regemarus* (12th c.) beside *Reimarus* (12th c.), cf. Tavernier-Vereecken 1968: 58–61. By comparison, in Old Saxon, *Reinbrat* first appears in an 833 document (copy 901–55) from Werden (Blok 1960: 202, nr. 46), although the same name is spelled as *Reginberti* in the list of witnesses at the end of the document. *Rein-* and *Rayn-* are also frequently found in the personal names from the ninth century of the *Traditiones Corbeienses*, which are preserved in an eleventh-century copy (Schlaug 1962: 144–7). Thus, the change of *Regin-* > *Rein-* can be dated contemporaneously with that of *Megin-* > *Mein-*.
39. OD<sub>U</sub>. *sigil* in the Latin text *porcos tempore glandinis quod sigil uocant pascendos introducant* ‘they let the pigs in to let them eat in the time of the acorns, which they call *sigil*’. This is an unedited fragment from the Gysseling collection, dated to around 1131 and without known provenance (ONW s.v. *sigil*<sup>1</sup>). The gloss *sigil* seems to refer to the acorn harvest, and accordingly a connection with OD<sub>U</sub>. *sigan*, MoD *zijgen* ‘to collapse, fall down, descend’ has been proposed. The word could represent a deverbal *l*-adjective \**sig-ila-* or \**sig-ila-*. If this etymology is correct, it would show that *g* was retained between two *i*-vowels at this stage of Old Dutch. Since we know nothing about the history of the text fragment, it is possible that *sigil* was copied from an earlier source; hence 1131 is only a terminus post quem non.
40. *steil* ‘steep’ < \**staig-la-* (Seibold 1970: 466) or \**staigula-* (Heidermanns 1993: 541f.). The adjective is derived from the verb *stijgen* < \**stīgan-*, cognate forms being OHG *steigal*, MHG *steigel*, and OE \**stægle*. The *g* is lost in all Dutch descendants (Middle and Modern Dutch *steil*) and in most of Low German (usually MLG *steil* but also *stegel*). The Germanic reconstruction is not completely clear: as noted by Heidermanns, adjectives in \*-la- suffixed to the root in the PGm. *a*-grade are rare. The more usual form of the suffix is \*-ula-, but then the root usually takes the zero grade. Hence, Heidermanns suggests that \**staigla-* might be a contamination of \**staigra-* ‘steep’ with \**stikla-* ‘reaching up’. The existence of an adjective \**staigra-* is shown indirectly in Dutch by its derived noun, MoDu. *steiger*, OD<sub>U</sub>. *stēger*, Early MDu. *steigher*, *stegher* ‘ladder, stairs’ < \**staig-rō-*. Hence, for *steil* a preform \**staigla-* seems more likely than \**staigula-*.
41. *tegel, tichel* ‘tile’ < \**tigulō-* < Lat. *tegula* and MDu. *tigele, tiechle* < \**tēgulō-* < Lat. *tēgula*. The various reflexes show that two different Latin words were borrowed, viz. the older variant *tēgula* and a more recent variant *tegula*. The latter probably introduced the short root vowel of the verb *tegere* ‘to cover’. The long

*ē* is reflected in the OHG diphthongs *ia*, *ie* (OHG *ziegala*, *ziagal*), in OS *tēgala*, and in Middle Dutch spelings with *ie* (and probably also those with *tig-*). The short vowel appears in OE *tigele*, ON *tigl*, and is continued in Middle Dutch as /e:/ (from lengthening and lowering in open syllable), southeastern /i:/, and before *ch* as short /i/. In Old Dutch, the noun is only attested in two toponyms, viz. *Tieglon* (1100), *de Tigele* (1195) ‘Tegelen’ in Limburg, and *Tigelrodo* (866 copy 18th c.), *Tigelrotha* (868 copy 18th c.), *Tithelrode* (1036 copy 1051–1100), *Tilroda* (1187), *Tilrode* (1206) ‘Tielrode’ in East Flanders. The latter name seems to lose its intervocalic *g* between 1036 and 1187; this is reminiscent of other sequences in \*-*igV*-, especially *ijl* ‘leech’.

For the Middle Dutch period it is difficult to get a reliable geographic picture of the different variants with *e/ie/i* and *g/ch*. The fortition before *l* in *tichel* is not attested before 1350, and may be due to syncope in forms which in the thirteenth century still had *g*. Kiliaan (1599) seems to regard *tichel(steen)* ‘tile’ as the normal (that is, Brabantish) word, whereas he ascribes *teghel(steen)* to Saxon, Sicambrian (= Guelrish), Hollandish and Flemish. Compare the Middle Low German variants *teg(h)el*, *teigel*, western MLG *tichel*. No variant \**teil* is attested.

42. *teil* ‘trough’ f. < \**tigulō-* < Lat. *tegula*. One Old Dutch form is attested in *thelen* (ACC.PL., 1199). Next comes the surname *Teil* (1284–95, WFla.) and Late Middle Dutch *teelen* (PL., 1441, Sluis in Flanders), *teele* in Flanders, Brabant, Zealand next to *teilen*. Kiliaan (1599) has *teyle* as his normal form, and *teele* as Flemish variant. In modern dialects, according to WNT, Zealand, Flanders and Twente have *teel(e)*, elsewhere we find *teil(e)* ‘trough, bowl’.

This noun presents palatalization of *g* in all dialects, and a further change of *ei* to *ee* in Flanders and Twente. No forms preserving *g* are attested. The close connection with *degel*, *diggel*, originally ‘pan, cauldron’ obliges us to assume that *teil*, too, was borrowed from Latin *tegula*. Franck & van Wijk 1912 suggest that the general shift to *ei* in *teil* as opposed to the retention of *g* in *tegel* ‘tile’ was due to the semantic isolation of the meaning ‘trough’ of *teil*, whereas *tegel* retained the meaning of *tegula* and may have been reborrowed several times. In any case, the general loss of *g* in *teil* throughout Dutch and Low German renders an earlier stage \**tegl-* very likely. The difference in vocalism with *degel*, *diggel* (see nr. 4 above) can be due to the same cause: fem. \**tigulō-* would have become ODu. \**tigl-* by syncope in most of its forms, unlike *degel* < \**digl* < \**digla-*.

43. *teil* ‘tail’ < \**tagla-* (Got. *tagl*, OE *taegl*, OHG *zagal*, NHG *Zagel* ‘tail’). In Early Modern Dutch we find *teil* with Frisian authors (Spranhuisen 1634, Hilarides 1695) and with Jacob Westerbaen from Holland (ca. 1650). In modern dialects of West Flanders (de Bo 1892, though unmentioned in WVD) and Zealand

(*teil*, *tēèle* ‘tail’ in WZD), *teil* is only attested in fixed, alliterating expressions, such as *van top tot teyl* ‘from tip to toe’, *over top en teil* ‘top over tail’, *met top en teil* ‘completely’, *teil noch top* ‘not at all’. In Groningen, the plural *tails* refers to a panicle of oats, and in North Holland, *teil* means the long, dried-out stalk of certain grasses.

It is striking that \**tagla-* has palatalized reflexes in all coastal dialects, unlike *nagel* ‘nail’ < \**nagla-*, where palatalization of *g* is only found in Frisian. Possibly, the appurtenance of *nagel* to the core vocabulary led to its introduction from the high-prestige, non-palatalizing varieties (Brabant, East Flanders) into all coastal dialects. The word *tagel*, however, was already replaced by *staart* in the inland dialects at the start of the Middle Dutch period, which would explain why *teil* could survive in specialized meanings in the coastal dialects.

44. *Teylingen* a toponym in South Holland. Found in Old Dutch as *Taglingi* (9th c. copy 11th c.) and *Teilinc* (end 12th c.?). Between 1200 and 1300, there are 69 attestations of the place-name, 29 of which have initial *T(h)ei/yl-* against 40 with *T(h)el-*. As there is no evidence for an original vowel between \**g* and \**l*, we may assume that *Teil-* directly reflects \**Taglingja-*, a derivative of \**tagla-* ‘tail’.
45. *vlegel* ‘flail’ < \**flagila-*. The form *vlegel* with preserved *g* is at home in the inland dialects of Dutch but also occurs in Flemish and Hollandish. The earliest Middle Dutch forms are *vleghel* (Fla., 1380–1425), *vlegel* (Fla., 1351), and dative *vleigele* (Hol./Fla./Brab., 1390–1410). In Early Modern Dutch, the eastern and Brabantish vocabularies all have *vlegel*, but *vlegel* also occurs in texts from Holland. The palatalized form *vleil* is found especially in Flanders and Zealand, thus in Middle Dutch plurals *vleyle* (Zealand), *vleylen* (Bruges), and in modern West Flemish *vlei(e)l*, *vlei*.
46. *Weinebrugge*, a West Flemish toponym and the former name of St.-Michiels (near Bruges). The earliest attestations are *UUeinebrugge* (962 copy ca. 1050, 1038), *UUai[ne]brucge* (964), *UUanebrugge* (966), *UUEinabriga* (1089), *Weinabrigga* (1089), *Weinbrigga* (1089). The name has been interpreted as containing \**wagna-* ‘cart, wagon’, see Leys 1961, who points to the toponym *Weynbritse*, *Wymbritse* (a regular reflex of \**wagna-brugjō* in Frisian) in southwestern Fryslân, which was Dutchified to *Waghenbrugghe* in the fourteenth century. The disadvantage of this explanation is that ‘wagon’ normally retains its *g* in all periods and dialects of Dutch: ODu. *Uuaganuuuega* (838, kop. 1091–1100; unlocalized place on the Veluwe), Early MDu. *wag(h)en*, etc. Also the connecting vowel in *Wein-e-brugge*, *Wan-e-brugge* is difficult to explain from a masculine first member \**wagna-*.

ONW interprets *Weinebrugge* together with West Flemish *Weinenduna* ‘Wenduinen’, *Weineuelt* ‘Winneveld’, and *Uuainaau* ‘Weginooi’ as containing \**wēgina-* ‘slanted’. The semantics of the latter three toponyms clearly seems in

favour of a first member meaning ‘slanted’ rather than ‘wagon’. Though ‘bridge of wagons’ seems a possible meaning for *Weinebrugge*, ‘slanted bridge’ seems possible too. No final decision can be made.

47. *zege* ‘victory’ < \**sigi-* or \**sigu-*. After the loss of final \*-z, the PGm. s-stem \**segiz-* (Kroonen 2013: 430) went over to the *i*-stems or, less often, to the *u*-stems (as in OHG *sigu*), suggesting an original suffix alternation \*-iz/-az/-uz-, cf. Casaretto 2004: 555–6. In compound names most of the evidence points to \**sigi-* (OS *Sigi-*) but OHG also shows \**sigu-* (*Sigobold*), see Braune & Reiffenstein 2004 § 220c. The appellative ‘victory’ is never found with palatalization of *g*: Early MDu. *sige* (Limburg 1240), *seghe* (WFla., WBrab.), MDu. *seghe*, MoDu. *zege*.

In compound names in Old and Early Middle Dutch the *g* has often disappeared. The Old Ghent documents show names in *Sige-* alternating with *Si-*: *Sieburgis* beside *Siborch* (11th c.+), *Sigefridus* beside *Sifridus* (11th c.+), *Siebertus* beside *Sibertus* (11th c.), and *Sigardus*, *Segardus* (10th c.) ‘Sigegard’, female *Sigarde* (1234–35, Fla.), *Siardis* (12th c.), *Ziardis* (1227), GEN. *Ziarde* (1234), NOM. *Syardis* (1241), cf. Tavernier-Vereecken 1968: 31, 83. In Egmond in North Holland, the male witnesses *Sibold* and *Sifridus* and female *Sigerda* ‘Sige-Garda’ (Oppermann 1933: 77, 79) have no *g*; maybe the names *Sibod-* and *Siwird-* attested in toponyms (12th c.) belong here too. Of course, in Egmond we may be dealing with Frisian names, compare Quak 2012a: 92. In the thirteenth century, we find \**sigi-brand-* as *Sibrando*, *Sybrand* with /i/, as shown by MoDu. *Sijbrand*. The chronological co-occurrence of variants in *Sige-* and *Si-* suggests that *g* became *j*, followed by contraction of \**Sije-* to *Si-*. This may be supported by the Old Saxon data, which are more numerous in the ninth and tenth centuries than Old Dutch. For instance, document nr. 39 from Blok 1960 (a Werden charter from 819, copy 901–950) contains the first attestation with palatalization: *signum Siard* ‘the signature of Sigihard’. At the same time, in the main text of this document, the Latinized form *ego Sigihard tradidi* is found. See Schlaug 1962: 150–2 for other Old Saxon attestations in *Si-* with loss of *g* from the ninth century.

The name *Seger* from \**sigi-harja-* represents a somewhat different case, as it is the only name in \**sigi-* to retain its *g* throughout Dutch; compare Old Ghent *Sigerus* (1098+), *Segere* (13th c.), etc. Apparently, *h* was lost in this compound, and the second and third syllable contracted before *g* could merge with *j*: \**Sigi-harja-* > \**Sigi-erja* = \**Sigerja* > \**Sigere*. In Xanten, the names *Sigeheri* and *Siger* are attested before 1045 (Tiefenbach 1984: 380).

48. *zelgel* ‘stamp’ < \**sigila-* N. < Lat. *sigillum*. Intervocalic *-ig-* is retained in Old Dutch, as shown by the Leiden Willeram: *insighela* ‘in-stamp’ (DAT.SG.), *besigelad*, -*t* (ADJ. NOM.SG.M.), *besigaladen* (DAT.SG.M.) ‘sealed’. Similarly, *g* is preserved after 1200: Early MDu. *sigel* (Limburg, with regular lengthened /i:/ in this dialect),

elsewhere *zegel*, *zeigel* (with lengthening to /e:/), cf. Berteloot 1984a, Map 87.

No variants of the type \**seil-* are found in Middle or Modern Dutch.

49. *zegenen* ‘to bless’ < \**segnoñ*, borrowed from Lat. *signare*. Old Dutch *gesegonot* ‘blessed’ (Middle Franconian Rhyming Bible) retains *g*. After 1200, palatalization to *ei* is found in Flanders, as opposed to the retention of *eg* (and fortition to *sech-*) in the other dialects: Early MDu. preterite *seinde* (10x WFla., 2x EFla.), present *seine*, *seinen*, *seint* (all 2x WFla.), as against ptc. *sechhende*, *segghende* ‘blessing’ (both 2x WBrab.), inf. *segghenes* (EBrab.), noun *segghennynghen* (EBrab.). Later Middle Dutch texts also show *seinen* in Flanders but *seghenen*, *sechenen* elsewhere. This opposition is explicitly recognized by Kilian (1599) and can be found in modern dialects: *zeinen* in Flanders, *zechenen* in Brabant and Limburg. The pervasive reflexes *ei* and *ech* in Early Middle Dutch confirm that we must base our reconstruction on the contact between *g* and *n* (as in OS *segnon*, OE *segrian*), the *o* of ODu. *gesegonot* and the *a* of OHG *seganon* being anaptyctic vowels. The expansion of modern *zegenen* may be due to the support of the noun *zegen* (which is first attested in the sixteenth century).
50. *zeggen* ‘to say’ < \**sagjan-*. The *g* is preserved in all Old Dutch forms: *sagen* and *sagon*, ptc. *gesaget*, *gesagot*, pret. *sagete*, *sagode*, etc. Early Middle Dutch normally has the variant *seide* in all preterite forms, with the exception of *seg(h)eide* in sources from Limburg and Holland. In the fourteenth century, according to CRM14, *seg(h)eide* is typically found in northeastern Dutch, further only *wi seghe-den* (Utrecht, 1333), *hi seghede* (Alkmaar, 1348), *sij zegeden* (Den Bosch, 1382).

In the past participle, *-ei-* is the rule in the thirteenth century in West and East Flanders, in adjacent Mechelen and Duffel, and in the Cleves/Guelders region, and *-ei-* is also found in Utrecht and Holland. South and East Brabant and Limburg usually have *gheseg(e)t*. This picture is confirmed by CRM14: the participle is *gheseit* ‘said’, *vor(e)seit* ‘aforementioned’ in all regions except for northeastern *gheseget*. More sporadic traces of *g* are clustered in North Brabant (e.g., *vorghesegde* Helmond 1316, *voregheseghet* Waalwijk 1304, *gheseghet* Den Bosch 1338, *onweders/zeghet* Breda 1354, 1380), and southwest of Antwerp (*vorseght* Rupelmonde 1335, 1359, *onverzeghet* Dendermonde 1328). West Limburg often has (*ghe)seet* with intervocalic *g*-loss. An isolated relic form is *voersegheden* ‘aforementioned’ in Egmond (North Holland) in 1336.

The 3SG.PRES. normally retains *g* in Early Middle Dutch *seg(h)et*, *segt*, *segghet*. Sporadically, *ei* occurs in Flemish, viz. in *ontseit-si* ‘she refuses’ (*Rijmbijbel*, 1285), *wederseit* ‘contradicts’ (2x in Ghent, 1237, versus 1x *weder seghet* in the same text), *wederseit* (Bruges, 1281; WFla., 1287). In the 2SG.PRES., where *seges*, *segs* are the usual forms, we find once *du seits* (*Wisselau*, WBrab., 1291–1300) and thrice *du seids* (*Rijmbijbel*, WFla., 1285). In CRM14 the 3SG. present is not very frequent. Retention of *g* appears to have been the rule in East Flanders,

Brabant and Limburg, whereas South Holland shows *seit* ‘says’, a form that is sporadically also found in Brabant (Tongerlo 1311, Sint-Pieters-Leeuw 1313, 1325, Zoutleeuw 1393). There are only two disyllabic forms in the whole corpus, in West Brabant (*zeghet* in Dendermonde 1328 and Merchtem 1343). More usually we find *seg(h)t*, or, with syncope of *g*, *seet* in Limburg (Hasselt, Diepenbeek).

For the modern dialects, van Bree (1969, 1971) has investigated the distribution of variants for the past participle, which concur to a large degree with the Middle Dutch data. In Holland, Zealand, Utrecht, and Flanders, the vowel matches that of the reflex of WGm. \**ai*, which means that we can equate the forms *zeit*, -*zait*, -*zoit*, -*zæt* in those dialects with MDu. *gheseit*. There is a clear isogloss (van Bree 1971: 351) between this western area with *ei* and the inland dialects of Brabant and southern Guelders where the vowel of the participle matches the reflex of WGm. \**e* in open syllable, continuing MDu. *geseget*.

A synoptic look at the three verbs *leggen*, *liggen* and *zeggen* may be useful, see Table 19. The distribution of Early MDu. *sei-* and *seg-* is pretty much the same as with *lei-* and *leg-* in ‘to lay’: *ei* occurs in most dialects in the preterite, and in the coastal dialects and the Cleves/Guelders area also in the participle. In contrast, *ei* only appears sporadically in the 3SG. of the present. In his analysis, van Bree (1971: 347) does not decide between preforms \**gisagid* or \**gisegd* << \**gisagd* for the coastal form in *ei*, but the Old Saxon data show that the match between grammatical form and phonetic development is much the same as for *leggen* ‘to lay’. In Old Saxon, the preterite participle is *gesagda* in Heliand ms. M, *gisagda* in C, V 1327, and the preterite 1+3 SG. is *sagda* (CVP), *sagde* (in M, but also *sagda*), 2SG. *sagdas*, plural *sagdun*, optative *sagdi*, -*n* (Gallée 1993: 267). If we assume that Old Dutch had similar verb forms as Old Saxon and Ripuarian, the prevailing *ei* in the Dutch preterite and the western *ei* in the past participle can be explained from suffixless forms where *g* and *d* were in contact (similarly Frings 1967: 336). We may assume that the preterite had become \**segda* in Old Dutch on analogy of the present stem; compare the existence of *legda* in ms. M of the Old Saxon Heliand.

In Old Saxon, the 3SG.pres. is *sagit* in Heliand C, *sagid* in the Prudence glosses, *sagad* in Heliand M, and *sagat* in Genesis. This suggests that MDu. *seg(h)et* is the regular phonetic reflex of \**sagit*; the rare variant *seit* must be due to a special cause. We cannot explain attested 3SG. *seits*, *seit* as analogical to the preterite, since the forms are (nearly) homonymous with the preterite 2SG. and 3SG. *seid(e)s*, *seid(e)*. Thus, the solution may be the same as we have proposed for 3SG. *leit* ‘lies’ next to *leghet*, *legt*. Whereas the regular development of \**sagit* led to *seghet*, it may have become *seit* in combination with a following enclitic pronoun: \**sagit* \**hī* > \**sag'tī* > *seidi*. This would fit the earliest Flemish

attestations of *seit* ‘says’, and the alternation between *weder seghet* and *wederseiteit* in Ghent 1237 and the forms *wederseite* and *ontseitsi* in van Maerlant’s West Flemish, very well.

Table 19. *g*-forms of *liggen*, *leggen* and *zeggen*

	Early Middle Dutch	Old Dutch	Old Saxon
to lay’			
3SG.PRES.	<i>leget</i>	—	—
3SG.PRET.	<i>leide</i>	<i>legede</i>	<i>lagda, legda</i>
PTC.	<i>ghelegt / gheleit</i>	<i>geleget</i> (LW)	<i>gilegid</i>
to lie’			
3SG.PRES.	<i>leghet</i> , more rarely <i>leit</i>	<i>lighet</i> (LW)	<i>ligit</i>
to say’			
3SG.PRES.	<i>seget</i> , rarely <i>seit</i>	<i>saget</i> (MRB)	<i>sagit, sagad</i>
3SG.PRET.	<i>seide</i>	<i>sagode</i> (LW)	<i>sagda</i>
PTC.	<i>gheseit</i> (W, Center), <i>gheseg(e)t</i> (E)	<i>gesagot</i> (LW)	<i>gesagda, gisagda</i>

51. *zeil* ‘sail’ < \**segla-*. The *g* is preserved in the Old Dutch gloss *segilgerden* ‘sail-rods’ and in the plural *segle* ‘sails’ in the *Glossarium Bernense* (Limburg, 1240). The other thirteenth-century tokens are all from the western dialects and all have palatalization: *seil* (12x Hol. and WFla.), *seilsteen* (WFla.), and the verb *seilen* ‘to sail’ (1x WBrab., 6x WFla.). The dictionary *Teuthonista* (1477) mentions both *segel* and *seil*. To Kiliaan (1599), *seyl* ‘cloth, sail’, *seylen* ‘to sail’ is the accepted variant, whilst he terms *seghel* an antiquated word for *seyl*. The noun is a neuter noun from the thirteenth century onwards in Dutch, as is MLG *segel*, *seil*. However, High German *segel* is masculine right up to the seventeenth century, when it becomes neuter under the influence of Low German (thus Grimm, *Deutsches Wörterbuch*). Possibly, the gender difference between High and Low German was originally semantically motivated, the masculine indicating an individual sail whereas the neuter referred to canvas as a the material (cf. Leiss 1997, Froschauer 2003). In Old English, *segel* is attested as a masculine in the singular, but both as a masculine and a neuter in the plural.
52. *zeine* ‘fishing net’ < Latin *sagēna*. In Middle and Modern Dutch, *g* is generally retained in most dialects except for Flemish and Hollandish: Early MDu. *see-gene* (Limburg 1240), DAT.SG. *seeghen*, *segenen* and NOM.PL. *seghene* (WBrab., 1291–1300), DAT.PL. *seghen* (NBrab., 1286), Late Middle Dutch has *seghen* in most sources. With palatalization we find PL. *seinen* (Ghent, 1433), dative *ter zeyn* ‘with a fishing net’ (Hol., 1514). Kiliaan (1599) has *segheine*, *saghene*, *seyne* “holl. fris.”, and *seyne*, *seyn-net*, *seygene* ‘fishing net’. Modern western dialects

have *sain* in Groningen (Molema 1895; this may be a Frisian loan), and West Flemish *seine, senne* (de Bo). Frisian also show palatalization: OWFRI. *sein*, MoWFRI. *seine*.

53. *zeis* ‘scythe’ < \**sagisnō-*. The change to *ei* can be observed in (nearly) all dialects, and forms with retained *g* are unknown. The noun displays a lot of variation in Dutch dialects, but most of it is due to a limited number of phonetic and morphological changes. The attested forms in Late Middle Dutch are *seysene* (Fla., 1350), *een seysene, seysine, dimin. seysenken, seysels* (PL.; WFla.); *seyssen* (*Teuthonista*, 1477); *seySEN* (northeastern Dutch, 1410–30), *zeynnen* (PL.; Hol.), *seynen* (Frisian statutes). Kiliaan (1599) lists *seyssen, seynsen, seyssel*, and he regards *seyne* as specifically “holl. fris. sicamb.”; furthermore he gives *sende*. Nearly all modern dialects display (a reflex of) *ei*, compare the map in TZN 1.13. The first syllable is mostly *zeis-*, *zèès-*, whereas metathesis to *\*-ns-* is attested in a few areas: *zeinse, zeinze* in western Zeeuws Flanders, *zen* in Kennemerland (but *zaans* on Marken), *zein, zain* in Waterland, West-Friesland and Texel, *ze-nze* on Urk, *zende, zinde, zeinde* in northwestern Overijssel, Stellingwerven and southern Drente, and *seine* and *saine* in Fryslân. See van Vessem 1956 for further details.

The attested variation can be explained along the following lines. The pre-form *\*sagis-nō-* led to MDU. *seisen(e)*, in which the suffix *-en* could be replaced by *-el* or (in some modern dialects) by *-em*. MoDu. *zeis* is a backformation provoked by a reinterpretation of *zeisen* as a plural in *-en*. The inherited form was competing with a metathesized form *\*saginsō* from an early stage on (Old Dutch or earlier), which led to an outcome *seyne*. The same metathesis is responsible for MoHG *Sense*. From *seyne*, the second *s* could be dropped analogically (because it was seen as a suffix) which yielded *zeynnen, seyne*. Dialectal *zende, zeinde* arose through the addition of a different suffix.

54. *zijl* ‘canal’. Possibly this noun reflects the same *\*sigila-* or *\*sigila-* seen in ODU. *sigil* ‘acorn harvest’ in nr. 39 above, derived from the verb *\*sīgan-* ‘to collapse, fall down, descend’. But *zijl* could also reflect the preforms *\*sig-la-* or *\*sig-la-*. All the evidence comes from coastal Dutch, beginning with the toponym *Sigeldriht* (SHol.; 1101–50) ‘Zijdrecht’. Early Middle Dutch has the m. DAT.SG. *sile, ACC. siil, zijl* (4x Hol., 1x eastern Dutch). After 1300 it also occurs as a feminine *zile*. Kiliaan (1599) defines *sijle, sille* as Hollandish and Frisian. In Modern Dutch, the noun is found in the toponym *Zijl* ‘canal’.

### 9.2.2 Summary and discussion

In order to assess the value of the evidence under review I will analyse it according to six different phonetic contexts in which Old Dutch \**g* stood before any syncope of internal vowels took place: (a) word-internal \*-VgC-, (b) word-internal \*-VgC- alternating with \*-VgV- (e.g. in masculine *la-* and *na-* stems), (c) word-internal \*-VgV- in simplexes in all forms of the paradigm (e.g. in *ila-* stems, in feminine *ulō-* stems), (d) word-internal \*-Vgi- in compounds, (e) word-final \*-Vgi(V), and (f) word-final \*-Vg#. Tables 20 to 25 specify whether the relevant forms have (1) palatalization in all forms, in all dialects (ALL), (2) never palatalization in any dialect (NONE), (3) palatalization in some dialects (SOME).

The evidence in Table 20 shows that *gC* always palatalized into *jC* across all dialects of Dutch. True, the evidence for the following consonant is restricted to *d* and *l*, and the preceding vowel is mostly *e* or at least it could be. In \**tagla-* we have a certain case of \**ag*, but here the palatalization is restricted to coastal Dutch. The verb *zeinen/segghenen* has *-gn-* but the exact reason for the partial absence of palatalization is unclear. Maybe *g* was restored in the dialects that have *segghenen*, or *gn* palatalized regularly only in coastal Dutch.

Table 20. The evidence from word-internal \*-VgC-

All	Some
<i>breidel</i> (* <i>bregdila-</i> ) ‘bridle’	<i>zeinen</i> (CDu.) / <i>segghenen</i> (* <i>segnōn-</i> ) ‘to bless’
<i>breien</i> (* <i>bregdan-</i> ) ‘to knit’	
<i>leide</i> (* <i>lagd-</i> or * <i>legd-</i> ) ‘laid’ (pret.)	
<i>zeide</i> (* <i>sagd-</i> or * <i>segd-</i> ) ‘said’	
<i>steil</i> (* <i>staigla-</i> ) ‘steep’	
<i>teil</i> , <i>Teilingen</i> (CDu.) (* <i>tagla-</i> ) ‘tail’	

Table 21. The evidence from word-internal \*-VgC- alternating with \*-VgV-

None	Some
<i>deger</i> (* <i>digra-</i> ) ‘thick’	<i>brein</i> (CDu.) / <i>bregen, bragen</i> (* <i>bragna-</i> ) ‘brain’
<i>leger</i> (* <i>legra-</i> ) ‘lair’	<i>dein</i> (Fle.) / <i>degen</i> (* <i>pegrna-</i> ) ‘thane’
	<i>rein</i> (Fle.) / <i>regen</i> (* <i>regnā-</i> ) ‘rain’
	<i>zel</i> (CDu.) / <i>segel</i> (* <i>segla-</i> ) ‘sail’

The evidence in Table 21 concerns stems in *-la-*, *-na-* and *-ra-*, which would have a paradigmatic alternation between, e.g., NOM.ACC. \**segal* versus GEN.SG. \**segles*, DAT. SG. \**seglo* in Old Dutch. Hence, there were varying conditions for the palatalization of *g*. The two *ra*-stems never show palatalization, which may be due to the phonetics of *r*. The other four stems show occasional (*rein*) or regular palatalization to *ei* in coastal

dialects versus the retention of *g* elsewhere. It is likely that, at least in coastal Dutch, an alternation between variants with *g* and with palatalization arose (e.g., between \**segel* and \**seil-*), which was leveled in the favour of the *ei*-forms. For non-coastal dialects, the existence of a similar alternation cannot be defended on the basis of Table 21.

Table 22, however, implies just such an alternation. Disyllabic stems in \*-*ula-* or \*-*ila-*, which would have had a vowel in between *g* and *l* at all times during Old Dutch (e.g., \**kegel*, \**kegeles*), generally retain *g*, as do the preposition *jegen(s)* and the noun *zege*. An exception is *vleil*. The retention in *regel* and *tegel* may be due to restoration of *g* from the Latin source word. By contrast, words of three or more syllables in Middle Dutch (which includes the stems in *ulō-* and \*-*ilō-*, which yield MDu. NOM.ACC.SG. -*ele*) tend to show palatalization of *g*. Among this latter group, there are two subtypes: *g* is always palatalized in *eizen*, *meisen*, *teil* and *zeis*, whereas the other words show palatalization in coastal Dutch but not in the dialects of the interior. This points to syncope of word-internal schwa as a condition for the palatalization. In words such as \**egison* and \**magadsin*, syncope apparently happened in all dialects. In feminine -*u/ilō-*-stems, the Early Middle Dutch paradigm would have been, e.g., NOM.ACC. \**tegele*, GEN.DAT. \**tegelen*, both offering a possible environment for *e*-syncope (as opposed to the m.n. *u/ila-*-stems). The alternations between *leget* and *leit* ‘lies’, and between *geleged* and *geleid* ‘laid’, also suggest that the length of the word (here maybe governed by the occurrence of enclitic pronouns) influenced the rise of *ei*. The fact that most *ei*-forms occur in coastal Dutch needs to be explained in connection with regional tendencies regarding syncope of unstressed vowels.

Table 23 collects the palatalizations in compound names in -*e/ige-*, -*e/igi-*. Here, palatalization is found in the west (Ghent) and east (Ripuarian, Old Saxon) from the ninth or tenth century on. Since syncope does not otherwise occur in names with a disyllabic first member, and since there is no written evidence for a stage \**egC*, it appears that *g* phonetically became *j* so that \**egi* (and \**ege* as in *Thegen- > Thein-*) was interpreted as *ei*. The early date of palatalization in names as compared to appellatives suggests that the prosodic characteristics of the names may have been instrumental in bringing about the change. The names were compounds with a primary and a secondary accent and an unstressed vowel in between (e.g. \**Engil-brāht*). In such a structure, the intermediate vowel could be reduced more than in trisyllabic simplex forms of the type \**éngilu* (DAT.SG.). This explanation of the type *Thein-*, *Eil-* is supported by the retention of *g* in *Sigeheri > Segere*. Here, the loss of *h* and the subsequent contraction changed the rhythmic structure of the name: instead of a compound with a main accent and a secondary one, as \**Sigi-hàri* would have been, it became a single-membered name with a single accent, \**Ségere*. Ascribing the earliest layer of palatalization to the rhythmic structure of words is also supported by the oldest appellative form to show palatalization, viz. WPs. *eiselika* vs. *egislikes* (confirmed by MRB *eislīch*): as is well known, the suffix \*-*lik-* retained secondary accentuation for a long time.

**Table 22.** The evidence from word-internal \*-VgV- in simplexes

All	None	Some
<i>eizen</i> 'be afraid' (* <i>agisōjan-</i> )	<i>diegel, diggel</i> (* <i>digula-</i> ) 'platen, shard'	<i>dweil</i> (CDu.) / <i>dwegel</i> (* <i>pwagilō-/-a-?</i> ) 'towel'
<i>meisen</i> (* <i>magad-sīn-</i> ) 'maiden'	<i>egel</i> (* <i>egila-</i> ) 'hedgehog'	<i>eide</i> (CDu.) / <i>egede</i> (* <i>agibō-</i> ) 'harrow'
<i>teil</i> (* <i>tigulō-</i> ) 'trough'	<i>ekster</i> (* <i>aga/istrjōn-</i> ) 'magpie'	<i>heydisse</i> (CDu.?) / <i>egedis</i> (* <i>agʷi-pahs(j)-ōn-</i> ) 'lizard'
<i>zeis</i> (* <i>sagisnō-</i> ) 'scythe'	<i>jegen(s)</i> (* <i>gagin-</i> ) 'toward'	<i>ijl</i> (CDu.) / <i>echel</i> (* <i>egilō-/egalō-</i> ) 'leech'
<i>zijl</i> (* <i>sig(i)la-</i> ) 'canal'	<i>kegel</i> (* <i>kagila-</i> ) 'cone'	<i>heinen</i> (CDu.) / <i>hegenen</i> (* <i>xaginōn-</i> ) 'to fence'
	<i>kregel</i> (* <i>krigila-</i> ) 'touchy'	<i>keilen</i> (CDu.) / <i>kegelen</i> (* <i>kagilōn-</i> ) 'to throw'
	<i>regel, reggele</i> (* <i>rigulō-</i> ) 'rule'	<i>geleid</i> (passim) / <i>geleged</i> (* <i>lagid-</i> ) 'laid'
	<i>rigel, richel</i> (* <i>rīgulō-</i> ) 'cross-bar'	<i>leit</i> (passim) / <i>leget</i> (* <i>legit-</i> ) 'lies'
	<i>tegel, tichel</i> (* <i>tigulō-</i> ) 'tile'	<i>meid</i> (CDu.) / <i>maagd</i> (* <i>magabi-</i> ) 'maid'
	<i>zegel</i> (* <i>sigila-</i> ) 'seal'	<i>peil(en)</i> (CDu.) / <i>pegel(en)</i> (* <i>pagila-</i> ) 'level', 'to measure'
	<i>zege</i> (* <i>sigu-</i> ) 'victory'	<i>vleil</i> (CDu.) / <i>vlegel</i> (* <i>flagila-</i> ) 'flail'
		<i>gezeid</i> / <i>gezeged</i> (* <i>sag(i)d-</i> ) 'said'
		<i>seit</i> (CDu.) / <i>seget</i> (* <i>sagit-</i> ) 'says'
		<i>seine</i> (CDu.) / <i>seegen</i> (* <i>saginō-</i> ) 'net'

**Table 23.** The evidence from word-internal \*-Vgi- in compounds

All	Some
<i>Eil-</i> (Fle.) / <i>Egil-</i> (Rip.) (* <i>agil-</i> )	<i>egislikes</i> but <i>eiselika</i>
<i>Mein-</i> (Fle. OS) / <i>Megen-</i> (* <i>makin-</i> )	
<i>Rein-</i> (Fle. OS) / <i>Regen-</i> (* <i>ragin-</i> )	
<i>Sij-</i> (passim) / <i>Sege-</i> (* <i>sigi-</i> )	
<i>Thein-</i> (Fle., OS) / <i>Thege/an-</i> (* <i>begna-</i> )	
<i>Frilingim</i> (< <i>Frigel-</i> ) 11th c. Fla.	
<i>Pendrecht</i> (< * <i>Pagin-</i> ) Hol.	
<i>Tilroda</i> < <i>Tigelroda</i> 11th/12th c. Flanders	
<i>Gheinmar</i> (Fle.) < * <i>Gagin-</i> ?	

Word-final \*-ag yields -ei in absolute auslaut in coastal Dutch in the names in -Dei, in kei, and maybe in the suffix -eie (Table 25).

An outcome  $*igC > /i:C/$  is attested in *ijl(e)* ‘leech’, *sile*, *sijle* ‘canal’ and the personal names in *Si-*, *Sij-*; and possibly also in *Frilingim* in *Tilroda*. On the other hand,  $*igi$  yields *ege* in *kregel*, *tegel*, *zegel* and *zege*. This means that the palatalization of *g* to yield *ij* took place before short  $*i$  plus retained *g* was lowered to *eg* in open syllable in Late Old Dutch. The spelling *<ij>* is clearly secondary in *ijzen* ‘to be afraid’ for earlier *eisen*, and probably also in Hollandish *brijne* next to *breyne* (Flemish, Frisian *brein*).

To sum up, we cannot postulate a single sound law to account for all the evidence. The palatalized forms in Tables 23 and 20 exclude each other as to their context, whereas Tables 23 and 22 have a similar context but happened at different times. The forms in Tables 20, 21 and 22 might ultimately have the same phonetic conditions for palatalization (viz. preconsonantal position of *g*) but there are differences in the dialect geography between them. Like the existing handbooks (most closely to our findings is van Loon 2014: 187–88), we must therefore differentiate between a change affecting *egiC* in Old Dutch, and a later palatalization of *g* directly before a consonant. The latter is found more frequently in coastal Dutch dialects, but it is unclear whether this is due to different phonetics of *g* or to a different frequency of word-internal syncope of schwa.

**Table 24.** The evidence from word-internal  $*-Vgi(V)$

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All

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*Leie* (941) < *Legia* river  
*kei* (\**kagi*) ‘stone’

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**Table 25.** The evidence from word-final  $*-Vg(V)\#$

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-*Dei* (CDu.) // *dag* (\**daga-*) ‘day’  
-*eie* < -*ege* f. agent noun

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In chronological order, we can posit the following developments:

1. Old Dutch and Old Saxon  $*egi$  developed into *ei* and  $*igi$  into *i* at an early stage in compound names, from 800 in Old Saxon.
2. The sequence Late ODu.  $*egC$  regularly palatalized into Early MDu. *eiC*. If it occurred throughout the paradigm, palatalization is found in all dialects (*breien*, *leide*, etc.). If  $*egC$  arose only in some forms of the paradigm, generally only the western Dutch dialects generalized *ei* (at least, before *l* and *n*).
3. The sequences  $*a/e/igVC$  in Late Old Dutch could be subject to syncope of the unstressed vowel in Early Middle Dutch if they were followed by one or more syllables. When syncope occurred, the result could be palatalization to *ei* (before obstruents and resonants) or fortition of the fricative to a geminate *gg* or

*ch* (before *l, n* only). The result *ei* cannot be called “palatalization of *g* before *i*” since the unstressed vowel would have become schwa before 1200, and since *magad-* did not contain \**i* in the second syllable. Palatalization to *ei* is more frequent in western dialects, though there are exceptions which occur across all dialects (e.g., *geleid*).

4. Palatalization of word-final *-a/e/ig* is sporadically found in western dialects (*-Dei, -eie*).

It seems likely that the phonemic shift of \**g* to *j* after palatal vowels was caused by the merger with /j/ in the diphthong /ei/, since we find general retention of /g/ after \**i* (*zijgen, krijgen*) and after the diphthong \**ai* (*dreigen* ‘to threaten’, *eigen* ‘own’, *reiger* ‘heron’, *weigeren* ‘to refuse’). In other words, ODu. /g/ had an allophone [γ] near palatal vowels, but it shifted to /j/ only if it combined into another, already existing phonemic combination (compare van der Hoek 2010a: 5). This claim is supported by the retention of *g* in \**-egr-, -agr-*, matching the fact that the sequence /eir/ did not exist in Old or Middle Dutch.

Among the alternating forms in Tables 21 and 22, there is a clear preponderance of palatalized forms in coastal Dutch dialects. This could be due to a different date of the word-internal syncope which created the cluster *gC*, to a different direction of paradigmatic leveling in the west than in the east, or to the different phonetics of /g/. Since *ei* arose in words such as *zeis* and *zeide* in all dialects, it seems difficult to maintain that there was a decisive phonetic difference between western and eastern /g/. There are some indications for different dialectal behaviour as regards the syncope of schwa in Early Middle Dutch. In trisyllabic word forms, Flemish sometimes has syncope where central Dutch dialects show apocope, e.g. in the DAT.SG. *segele* ‘seal’ giving *segel* versus *segle*, see Marynissen 1995: 100. It can be hypothesized that coastal Dutch more often applied syncope (*regenet > regnet*) whereas eastern Dutch preferred apocope or the syncope of the post-posttonic schwa (> *regent*), and that this ultimately led to a higher proportion of *ei*-forms in the west. It remains unclear why coastal Dutch would have preferred syncope. A more extensive investigation of syncope patterns in Old and Early Middle Dutch is required to clarify this point.

The reflex *teil* of \**tagla-* ‘tail’ is striking in view of retained *g* in *nagel* ‘nail’ < \**na-gla-*, *hagel* ‘hail’ < \**xagla-*, dial. *gagel* ‘gums, palate’ (Kiliaan *gaghel*) and *wagen* ‘car’ < \**wagna-*. Possibly, the latter words represent the Franconian forms which were adopted by the speakers of coastal dialects when they shifted from Proto-Frisian to Franconian. We may then hypothesize that *teil* ‘tail’ was not replaced because its Franconian counterpart was the different lexeme MDu. *stert*, MoDu. *staart*.

### 9.3 The prefix *ge-/(j)e-* < \**ga-*

In Dutch lexemes, the sequences \**ge-* and \**gi-* are regularly written with <*g(h)-*> in Early Middle Dutch and realized with /y-/ in the modern standard if the vowel is stressed: MDu. *g(h)e(e)rne* ‘readily’, *g(h)even* ‘to give’, *g(h)elt* ‘money; infertile’, *g(h)esteren*, *g(h)isteren* ‘yesterday’, etc. The velar is also preserved in the sequence \**gai-* which can yield *gee-* or *gei-*, as in *geest* ‘spirit, ghost’ and *geit* ‘goat’.

The only exception is the perfective and collective prefix PGm. \**ga-*, which was palatalized in some of the western Dutch sources but is generally *ge-* in southern and southeastern Dutch. Which intermediate stages between \**ga-* and the palatalized forms must we reconstruct for the different dialects, and how can we explain the geographic distribution of variants?

The use of \**ga-* in Proto-Germanic depended on the semantics and pragmatics of the word, which means that \**ga-* was an optional prefix. Verbs which already had another prefix, such as \**bī-* or \**fra-*, did not add \**ga-*. This optionality partly explains the vacillation in its usage in later times.

In the Old Dutch Leiden Willeram, nearly all past participles take *ge-*, with the exception of *fundan* ‘found’, *cuman* ‘come’, and *worthan* ‘become’. The latter are also frequently found as *ge-less* participles in later Dutch dialects (Weijnen 1976: 287). Some of the LW forms without *ge-* translate participles of the High German original that did have *ge-* (cf. Sanders 1974: 167): *the ther iugethet sint* ‘who are rejuvenated (there)’, *thaz branda siluer* ‘the purified silver’, *thiu uzera rinda ... in wine drunchan dualm machot* ‘the outer rind (...), drunk in wine, makes dizzy’, *gelich then scorenen scaphan* ‘like the shorn sheep’, *thero scorenon scapho* ‘of the shorn sheep’, *also ther wurzedo win* ‘like flavoured wine’. Except for *iugethet*, these participles are used as adjectives, and one might even take *iugethet* as an adjective, since *iugethen* (for OHG *iugēn* of the *Vorlage*) denotes a process rather than an action. It might be the case that the Dutch translator of the Willeram consciously omitted *ge-* in these attributive participles. Sanders (1974: 169) implies that the translator’s prefixless participle has resulted from Anglo-Frisian palatalization: “Da für die frühe Zeit *ge-Abfall* nur für das Friesisch-Nordholländische vorausgesetzt werden darf, liegt hier ein starkes Argument für Egmonder Herkunft der Handschrift.”<sup>60</sup> This view is not compelling. The syntactic similarity of the *ge-less* forms in the Leiden Willeram points in the direction of a functional rather than a phonetic reason for the absence of *ge-*. Quite possibly, *ge-* was never generalized in the past participle in the dialect of the western Dutch scribe.

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60. ‘Because procope of *ge-* can only be posited for Frisian-North Hollandic at this early period, this provides a strong argument for the manuscript originating from Egmond.’

There is one palatalized form in Leiden Willeram 51.13, viz. *iegiuan* ‘given’ (the original has *gegéban*), as against usual *ge-* (e.g. *gegiuon* 69.16). Sanders (1974: 168) concludes that the western Dutch copyist had the three prefix variants *ge-*, *ie-* and *zero* in his morphological system; but if *ie-* is an indicator of the genuine speech of the translator, he may have used only *ie-* versus *zero*. In that case, we can surmise that he pronounced written *ge-* of the model as *je-*, which shows up in writing only once in *iegiuan*. This conclusion is supported by the single occurrence of the preposition *iegen* for *gegin* ‘against’ in the same text.

The other larger Old Dutch sources spell the prefix \**ga-* as *ge-* throughout (MRB), or with *ge-* next to *gi-* (WPs.). Among the toponyms from before 1200, only Southwest-Flemish *Steniewerka*, *Stenieuerka* ‘Steengewerck’ (= MDu. *steen ghewerke* ‘a stone construction’) shows *je-*.

The thirteenth century has been studied in detail by Berteloot (1984a, Map 145) and Mooijaart (1992: 184, 266ff.). Here, *i-* as opposed to *ghe-* is restricted to West Flanders and a single token in eastern Zeeuws Flanders. There are various ways of spelling the prefix, mainly as *i-*, *hi-*, *j-* or *y-*, which all seem to indicate /i-/. Less frequent, but probably more archaic, is the spelling *ie-* for /je-/ or /jə-/, as in *ie-waschen* ‘washed’ (Bruges, 1284). This variant is found more commonly in southwestern Flanders: *ieloven* ‘believe’ (Veurne, 1298), *jeconreit* ‘ready’ (Calais, 1253), *jemetē* ‘gemet’ (Oudenburg, 1282). These forms suggest that the first step in the development was the palatalization of *ge-* to *je-*, later followed by contraction of *je-* to *i-* in most varieties. Still, *g(h)e-* remains the preferred written form in Flanders. Palatalized variants surface most frequently in documents from Bruges, especially in the participle. In the noun *gemet*, a toponym indicating a measure of land, *i-* occurs more widely in West Flanders. Other evidence for palatalization includes *jbanne* ‘banned’, *jwaerne* ‘to vouchsafe’, *ystade*, *jstade* ‘steady’, *hiheleke* ‘wholly’, *ymene* ‘mean’, *ylic* ‘equal’, *ywande*, *ijwande* ‘cloth; loom’ (van Haverbeke 1955: 73f.), *yslachte* ‘race, species’, *ynouch* ‘enough’. In inlaut of compounds we find palatalization in *landimarc* (= *lande ymaerke*) ‘border’ and *ja(e)r(h)itide* ‘season’ (MoDu. *getijde*).

The rise of the reflex *i-* is usually explained by the following chain of phonetic changes: \**ge-* > \**gi-* > *ji-* > *i-* (e.g., Hol 1941: 263, Schönfeld & van Loey 1970 § 136). The intermediate stage \**gi-* is hypothetical, as we find written evidence in Flanders only for *ge-*, *je-* and *i-*. Of course, the spelling *gi-* is common in the Wachtendonk Psalter and in Old Saxon sources; but for coastal Dutch, the forms of the Leidener Willeram and the earliest toponyms (with *ie-*) rather suggest a development *ge-* > *je-* > *i-*. An intermediate stage \**ji-* is conceivable but unattested in our sources.

Palatalization is also normally found in the verb \**ga-unnan* ‘to grant, concede, award’, German *gönnen*. All Early Middle Dutch forms have initial *j-* (1SG.+3SG. *ian*, PL. *jonnen*, PRET. *ionde, jonste*), and all are attested in Holland or Flanders. They show a development from \**ge-onnen* via \**je-onnen* to *jonnen*. In the same period, the verb

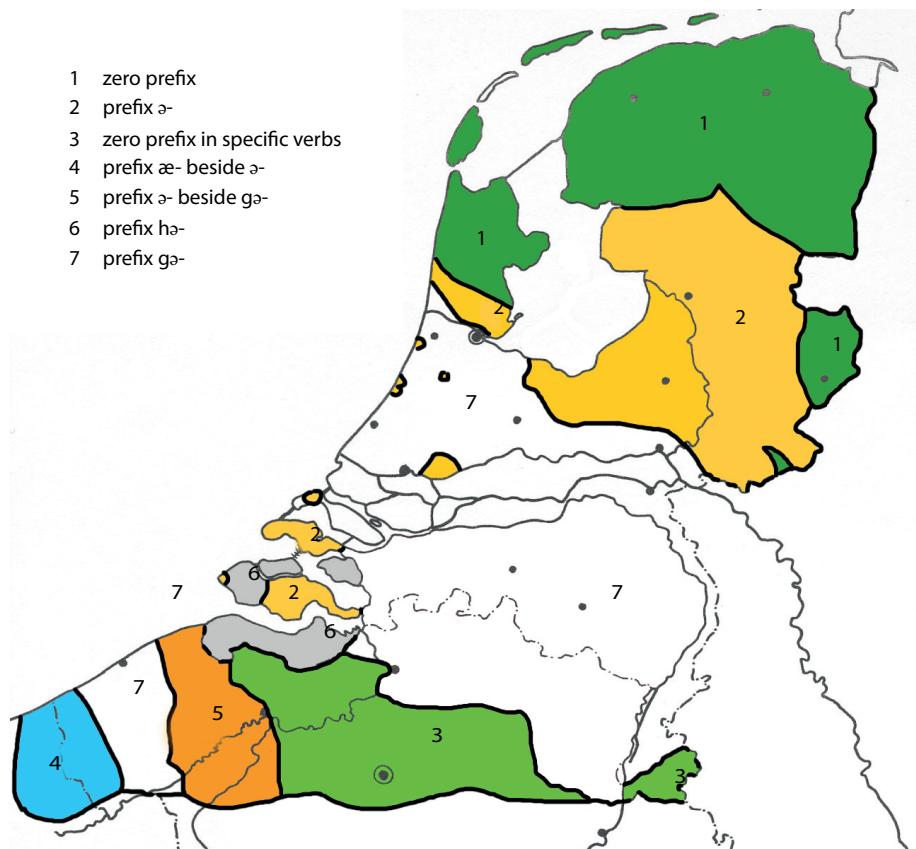
is still attested without a prefix as SG. *an*, PL. *onnen*, and twice with a past participle *gheonnet* in West Holland / Northwest Brabant. In fourteenth-century Dutch, however, uncontracted *ghe-onnen* (inf. *gheonnen*, 2PL. *geont*, 3SG.+GEN. *ghean-s*) has become frequent. Since *jonnен* is the original reflex of PGm. \**ga-unnan*, *ghe-onnen* arose from the analogical addition of *ghe-* to *onnen*. Soon, *gheonnen* underwent vowel contraction, so that we find 3SG. *gan* for instance with Willem van Hildegaersberch around 1400. In the east, where *ge-* did not normally palatalize to *je-*, the verb forms of *gonnen* may represent original \**ga-unn-* with vowel contraction.

Unconditioned fronting of \**u* caused the change of western *gonnen* into *gunnen*. In the seventeenth century, *gunnen* has already generalized the weak preterite (*gan* >> *gunde*). In Holland, *jonnен* and *gunnen* occur side by side, with the latter replacing the former in general usage. In Flanders, *jonnен* has remained a current word.

In Old Germanic, perfective and stative verbs normally formed their past participle without the prefix \**ga-*. In Early Middle Dutch this situation is still valid for all dialects, for example with the verbs *blijven* ‘to remain’, *brengen* ‘to bring’, *komen* ‘to come’, *lijden* ‘to go, pass’, *vinden* ‘to find’, *worden* ‘to become’. As appears from Mooijaart’s map (1992: 266), the addition of *ghe-* to these participles started in Holland but *ghe-* did not spread beyond that region in the thirteenth century. In the twentieth century, the prefixless use with these verbs was restricted to parts of southern Dutch.

Map 6 displays seven of the main forms of the participial prefix StDu. *ge-* in Dutch and Frisian dialects as spoken in the early twentieth century.<sup>61</sup> A zero prefix (nr. 1) appears in a large area comprising North Holland, Fryslân, Groningen and most of Drente, as well as in Twente and around Aalten in the Achterhoek. Directly to the south of this area, the prefix has the form *ə-* (nr. 2), among others, in the Zaanstreek of North Holland, and in a central-eastern area from eastern Utrecht across Gelderland and Overijssel to southwestern Drente. The same prefix *ə-* appears in a few coastal villages of South Holland, on the islands of Goeree and Schouwen-Duiveland and in Zuid-Beveland in Zealand. Finally, *ə-* also occurs in the western part of East Flanders (nr. 5) where it competes with *gɔ-*. In French Flanders and southwestern West Flanders (nr. 4), the prefix is realized as a low front vowel *œ-* (next to *ə-*). In most of East Flanders, in South Brabant and in relic areas in southern Limburg (nr. 3), the prefix is *gɔ-* but in a restricted number of (originally perfective) verbs, the participle does not take a prefix. The central Dutch area (nr. 7) and parts of West Flanders have only the Standard Dutch form *gɔ-*. Of course, this has local phonetic variants, of which the map only indicates the Zealandish areas where initial *g-* is pronounced as *h-* (nr. 6).

<sup>61</sup>. The original map is online at [www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=14325](http://www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=14325).



Map 6. Simplified representation of the map “ge- in voltooid deelwoord” in *TNZN* vol. 2, Map 9.

Hol (1941) shows that sources from the seventeenth to the nineteenth century display a much wider original spread of *a*- in rural Holland as well as in the towns. Therefore, there used to be a large *a*-area in Early Modern Dutch which stretched from Zealand to North Holland. Some forms with *e*- can already be found in Middle Dutch: *niet vroed enoech* ‘not wise enough’ (SHol., 1322; cited by MNW). The Flemish areas with *a*- and *æ*- could be directly connected, though this has yet to be established.

It is striking that the medieval variant *i*- has completely disappeared from Flanders in the twentieth century. Hol (1941: 265) assumes that MDu. *i*- had been lowered to [i]- in Flanders and was then further lowered to [ɛ] or [æ-], if not [a-]. A parallel for this reduction would be initial *bi*- > *be*- in unstressed position.

In his reaction to Hol’s article, Verdenius (1942) points out that there is evidence for a zero prefix in South Holland in the Late Middle Ages with other verbs

than the usual perfective and stative ones, citing forms such as *wonnen* ‘won’, *reden* ‘driven’, *cust* ‘kissed’, and *maect* ‘made’ with Willem van Hildegaebersberch, *sweghen* ‘remained silent’, *slaghen* ‘hit’, and *spaert* ‘saved’ with Dirc Potter, and others. However, the instances in van Hildegaebersberch’s poems are almost certainly determined by the metre, since they co-occur with *ghewonnen*, *ghereden*, *ghecust*, *ghemaect*. For North Holland, Verdenius argues that the zero prefix area could be found immediately north of Amsterdam in the seventeenth century, that is, further south than was the case in the twentieth century. For more on the Middle Dutch prefixless participles, see Pijnenburg 1982 and Berteloot 2004.

These observations lead me to reconstruct the following scenario. A zero prefix in all past participles once existed in all of Zealand and Holland in the Middle Ages. It was gradually ousted and now only remains in the north of North Holland. It is conceivable that the original coastal Dutch dialects had a contextually determined alternation between (\**ge-* > \**je-* >) *ə-* and zero, which may have depended on the syntax (predicative versus attributive participles) or on the phonetic environment. In fact, so much is suggested by the Leiden Willeram (ca. 1100), where attributive participles can take a zero prefix. Some dialects would have generalized zero and others *ə-*, before the inland variant *ge-* was adopted. At a later stage, prefixless participles were replaced with *ə-*, and, at a more recent stage (from the Late Middle Ages on), with *gə-*. It must be stressed, however, that this scenario remains tentative due to the lack of data.

In Flanders, *ə-* was the phonetic successor of *i-*, and in Holland, as in Flanders, *jonnен* attests to the original palatalization of unstressed \**ga-* to \**jə-*. This suggests that all modern dialects which now have *ə-* (Flanders, Zealand, Holland, possibly also Overijssel and Gelderland) went through a stage with unstressed \**ge-* > \**jə-* > \**i-*. In that case, the absence of written *i-* or *e-* in Middle Dutch sources from Holland is striking, though it must be noted that, even in Flanders itself, *g(h)e-* is the preferred spelling of the morphologically transparent words, whereas *i-* is mainly found in lexicalized formations such as *gemet*, a specific, regionally used land measure (Mooijaart 1992: 186–7). In any case, an alternative explanation for the modern prefix *ə-* is hard to find. There is no general loss of prevocalic *g-*.

A brief comparison with Frisian is in order. In Proto-Frisian, short \**a* was fronted to \**æ* unless in front of nasal and a restricted number of consonant clusters. Also excluded were some unstressed words, such as *was* ‘was’ (Bremmer 2009: 29). WGm. \**g* became /j/ before and after front unrounded vowels, including \**æ*,<sup>62</sup> whereas it remained a velar stop in most other positions. Unstressed \**ga-* also seems to have undergone vowel fronting, judging by Runic Frisian *ji-* in *jibæda* ‘prosperity’

62. But excluding PFri. \**æ* from WGm. \**ai* before an *i*-mutation factor, cf. de Vaan 2011a.

(OS *gibada*) in the Westeremden B inscription (ca. 750–800 CE). I quote Bremmer (2009: 86) on the main line of development: “The perfective prefix \**ie-* (< \**ga-*, \**gi*) has usually been reduced to *e-* or *i-* in Old East Frisian texts, or has disappeared altogether. This process has proceeded even further in Old West Frisian, and all Modern Frisian varieties (West, East and North) have no such prefix before past participles any longer nor does it appear before any other inherited verbal form. However, under the influence of Middle Low German and Middle Dutch, the prefix is regularly found as *ge-* or *ghe-*.” Examples of the retained prefix in Old Frisian are *edēn* ‘done’, *eskepin* ‘created’, *enōch* ‘enough’. Word-internal position is more likely to retain *e-/i-* in Old Frisian, viz. when \**ga-* is preceded by another prefix: *unidēld* ‘undivided’, *unebern* ‘unborn’, *unewis* ‘uncertain’ (Bremmer 2009: 37).

Thus, unstressed \**ga-* yielded Old Frisian *e-* via \**je-*, which looks very much like the Middle Dutch outcome *je- > i-*. This supports the theoretical possibility that the western Dutch reflexes were part of a larger areal phenomenon (affecting Proto-Frisian and western Old Dutch), or arose by a language shift from Proto-Frisian to Old Franconian as a phonetic substrate feature.

## 9.4 Initial *j- > g-*

A change of word-initial *j-* to *g-* is found in all lexemes which had initial (stressed) \**je-*, \**ji-* or \**jī-* at the Old Dutch stage.<sup>63</sup> There are no Dutch forms in *j-* from original \**je-*, \**ji-* or \**jī-*.

### 9.4.1 The evidence

#### 1. *geden* ‘to weed’.

The Proto-Germanic verb \**jedan-* (OS *gedan*, OHG *jetan* beside *getan*, MoHG *jäten*, cf. Seebold 1970: 286, Kroonen 2013: 272) is reflected twice in Old Dutch. The Leiden Willeram has *getan*, where the *t* probably stems from the original High German version *iétan*. The Prudentius glosses (951–1000, from the border of Guelders and Westphalia) have *gegedenen*, DAT.PL. of the past participle. Early Middle Dutch only yields *geden* ‘to hoe’ and *gede* ‘hoe’ in Limburgian (1240). All

63. MoDu. *geur* ‘scent’ has sometimes been adduced as representing a preform \**juzi-*. It is found in Brabant as *ghoere* (1265–70), *goere* (1276–1300), later also *gure* (1300–50), *guere* (1375–1400). It has been connected with German *gären* < OHG *jesan*, *gesan* with PGm. \**j-*. Yet *geur* has also been connected with the adjective *goor* ‘muddy, filthy’ and the noun *goor* ‘mud’ (OE *gor*) which continue PGm. \**g-* (OE *gyre* ‘manure’ < \**gurwja-*). The etymology being unclear, I leave *geur* out of the discussion.

subsequent Middle Dutch attestations are also southeastern, viz. *geden* ‘to weed’ in the *Limburgse Sermoenen* (ca. 1300) and *gheden* ‘to weed’ and *ghede* ‘tool for weeding’ in *Teuthonista* (1477). In western Dutch, the verb appears to have been lost. This distribution is confirmed by modern dialectology, which shows that most Dutch dialects use *wieden* and only parts of Limburg have *geden*. In Germany, initial *g-* instead of *j-* is very widely attested in historical documents from the Cleves/Guelders area through Ripuarian and Moselle Franconian to Mainz, as well as further east and south (Koivulehto 1971: 75–99, 164, 166).

## 2. *gene* ‘yon’.

The demonstrative pronoun MDu. *g(h)ene* m.f., *ghent*, *ghint* n. ‘yon’ (Gothic *jains*, OHG *jener*) shows some variation in the root vocalism, in particular the well-known rounding to /ø(:)/ in Flemish *gone*, *goen* (Berteloot 1984a, Map 89). The Dutch forms, as well as German *jener*, continue PGm. \**jen-* with lengthening in open syllable (see EWN s.v. *gene*). The pronoun is combined with demonstrative pronouns in StDu. *diegene*, *datgene*, also *de-*, *hetgene*, but the simplex *gene* survives as a demonstrative in locatival expressions in onomastics in southeastern Dutch (Jongen 1970). No forms in initial *j-* are attested in Dutch outside Ripuarian, where every *g-* has become *j-*.

For adverbial PGm. \**jendr-* ‘yonder’ (Got. *jaindre*, *jainpro*, OS *gendra*), we find Early Middle Dutch *g(h)inder* in all dialects. Another derivative is Early MDu. *g(h)ens*, *g(h)ins* (WBrab., WFla.) ‘to yonder side’, *gontswaer* ‘to the other side’ (Bruges 1281), MoDu. *ginds*. No forms with *j-* have been preserved.

## 3. *gij* and *jij* ‘you’.

The second person plural nominative of the personal pronoun, PGm. \**jūz* ‘you’, was replaced by \**jiz* in West Germanic. In Dutch dialects, the change of *j-* to *g-* yielded the forms *gi*, *gij*. The oblique form \**iu* retains *j-* in StDu. DAT.ACC. SG. *jou*, *j-*.

In Old Dutch, *gi* is found in the Blood Spell from northern Guelders (1000–50) and twice in the Wachendonck Psalter (*gi slapit* ‘you sleep’ and *uuanitygi* ‘think you’) in ms. I, next to once *ir* in ms. A. The form *gi* never appears in the Leiden Willeram or the Middle Franconian Rhyming Bible, which have High German *ir*. The Old Saxon 2PL. *gi*, *ge* and 2DU. *git* have a *g-* which must phonetically have been close to /j-/ (Gallée 1993: 167), but Goossens 1994: 163 argues that it must represent a real /g-/ since we still find *g-* in modern Westphalian dialects.

In Early Middle Dutch, the usual form is *g(h)i* in the whole Dutch area, with the exception of southeastern *gir*. Inversion of the finite verb and the pronoun normally produces voicing of the final dental of the verb form plus a reduction of the pronoun to *-i*. For instance, *gevet gi* ‘give-you’ becomes *ghevedi* (van Loey 1976: 34).

In southern Dutch dialects, stressed *gij* has remained the form of this pronoun until today; the unstressed subject form *ge* of modern dialects is a later development.

In Holland, a different form *jij* /jɛɪ/, enclitic *je*, prevails in modern dialects. The oldest attestation of *jij* is found in a language guide from 1550: *hier zalmen oac notéren hoe dat men zommighe lieden vind die zegghen iy of jy voor ghy* ‘here it will also be noted how some people are found who say *iy* or *jy* for *ghy*’ (Lambrecht, *Nederlandsche spellijnghe*). In literary texts, *jij* starts to appear in the early seventeenth century when rendering colloquial speech from Holland, as in Hooft’s *Warenar* (1617). Enclitic *je*, however, is attested much earlier, viz. from the fourteenth century on: *Onrecht hebje* ‘you are wrong’, *Wil ye horen, ghi scepenen* ‘Will you listen, you aldermen’ (Aardenburg, 1300–50).

These data are open to different explanations and have been the subject of vivid discussions in the past (cf. Verdenius 1924, Muller 1926, Verdenius 1930, van Haeringen 1938: 204, Devos 1986, Goossens 1994: 39–63). Traditionally, it was assumed that *jij* and *je* are coastal Dutch forms which directly reflect \**jī*; they would simply have escaped the change of *j-* to *g-* which we find further south and east (Muller 1926). Their almost complete absence from Middle Dutch would be due to their colloquial status as opposed to written *g(h)i*. Verdenius (1924) was the first to object to this view, and a modified version of his own solution has now become standard (see Devos 1986, Goossens 1994: 39–63). Verdenius assumes that the *j*-forms developed from *gi*, with palatalization of the final dental of the 2PL. verb ending: \**gevet-gi* > *geved'i*. Such a palatal dental would either have developed into a cluster [dʒ] which was phonetically reduced to *j*, or it would have been reanalysed as *t/d + j*.

This theory accounts better for the historical attestation of the *j*-forms and for the modern dialectal distribution of the variants of *ge/je*. As to the historical sources, the traditional theory (viz. that *jij*, *je* directly reflect WGm. \**j-*) does not explain the absence of *j*-pronouns from Early Middle Dutch, nor why two centuries elapsed between the first appearance of enclitic *je* (14th c.) and tonic *jij* (16th c.). The traditional theory also does not explain why *g*-forms are found deep within modern *j*-territory in West Flanders (Devos 1986: 178f.), or why the final dental of the verb ending has disappeared in inverse sequences of the type West Flemish *gaje* ‘go-you’ (Verdenius 1924, Devos 1986: 74).

Thus, enclitic *-je* must have been the Middle Dutch product of *gi* after a dental stop, where a cluster \**tg* arose much like in the names in *Gardis* and like \**tk* in the diminutives in *-tken*. The *j*-pronoun was then extended to tonic preverbal position, in the same way that colloquial and dialectal *me* ‘we’ reflects enclitic *me* which arose from *we* after a preceding labial obstruent (Devos 1986: 179). What still needs to be explained is the restriction of *j*-forms to the coastal Dutch area (including southwestern Brabant for the type ‘go-you’). This restriction might be linked to the occurrence of palatalization (traditionally called *mouillering* in Dutch linguistics) of dental clusters in parts of Brabant and Limburg; see Devos 1986: 181f. for the relation with *je* and *ge*, and Keymeulen 1993, Taeldeman 1993, Goossens 1993 for

the palatalization of dentals in general. The *d'* in *gad'i* ‘go-you’ was apparently depalatalized in many dialects in Brabant, yielding *gade*, where palatalized dentals were normal allophones of the dental stops and resonants. In the west, however, such palatal allophones did not normally occur (in any case, not before the diminutives in *-tje* arose), which may explain why western dialects were more prone to resolve *gad'i* as *ga(d)+ji > -je*.

The stressed form *jij* is (originally?) restricted to the dialects of Holland and is first attested in 1550. It may well have arisen next to *je* on the model of stressed *mij* next to enclitic *me* ‘me’, *zij* next to *ze* ‘she’, and *wij* next to *we* ‘we’; thus EWN. Note also that *j-* in oblique *jou* is spread more widely in Middle Dutch (and mainly in Holland and Zealand), and its *j-* probably has a phonetic origin from WGm. \**iu*. A Hollandish late medieval paradigm NOM. *gi*, enc. *je*, DAT.ACC. *ju, jou*, enc. *je* would have provided enough paradigmatic pressure to replace the nominative *gi* by *ji*.

The oblique form WGm. \**iu* (German *euch*) was used in Old and Middle Dutch only for the plural: ODu. *reslāt alla iu* ‘he destroys you all’ (WPs.); Early MDu. *wie doen ju te wetene* ‘we are letting you (PL.) know’ (1274), *vie doen jou allen tewetene* ‘we are letting all of you know’ (1282). After 1500, *jou* is also found in the singular. As Lambrecht (1550) puts it: *iou ghebrûken de Hollanders ende mear ander als zy zegghen Ic hebt iou ghegheven voor ic hebt ù gheghéven* ‘*jou* is used by the Hollandish and others too when they say: *ik heb het jou gegeven*, instead of: *ik heb het u gegeven*’.

WGm. \**iu* was syllabified either as /ju/ or as /iu/ depending on the dialect; compare Goossens 1994: 64–71. In Middle Dutch, these further developed as *ju > jou* next to *iu > u*. The modern standard language retains both forms but has redistributed their functions: *jou* is the singular form and *u* the polite plural (French *vous*). The same formal variation is found in the possessive adjective ‘your’: ODu. *iuwa*, MDu. *ju(w)*, *jou(w)* versus *u(w)*, *ou(w)*, MoDu. *jouw* ‘your’ (SG.) vs. *uw* ‘your’ (polite PL.). In Early Middle Dutch, *juw(e)* is found in a minority of cases and only in western Holland (*ju, juwer, iu*) and Flanders (*juwe, juwer, jue, juen, iu, ive, iven*, once *iouwe*). Most dialects have *uwe, uwen*, but in the Cleves/Gelders area we also find *íwe, íwen*.

We may conclude as follows for *gij* and *jij*. The inherited pronoun \**ji(r)* developed initial *g-* in all dialects in all syntactic positions. Together with the final dental of the verb form, the inverted pronoun developed into a palatalized dental cluster, whence a new pronoun *je* was metanalysed in western Dutch, partly stretching inland towards southern Brabant. The oblique personal and the possessive pronoun \**iu(wa)* became *ju(we)* in coastal Dutch but *u(we)* further inland. In Holland, the combination of subject *-je* and oblique and possessive *jou(w)*, *je* led to the analogical replacement of *gi* by *ji > jij*, which first surfaces in writing in the sixteenth century.

#### 4. *gist* ‘yeast’.

Proto-Germanic \**jesta-* (ON *jöstr*, OE *giest*, MoE *yeast*, MHG *jest, gest*) yields MDu. *gest* (NE-Dutch, 1300–50), *ghest* (Holland, Brabant, Cleves/Guelders) beside *gist* (Brabant), *onderghist* (Fla., 1426–60). Raising of *e* to *i* before *st* occurs in several other Middle Dutch words (*gisteren* ‘yesterday’, *nist* ‘nest’, *nistelen* ‘to nest’) and confirms that *gest* was the original form. After 1600 we usually find *gist* in written sources, but see *Meertens Kaartenbank*<sup>64</sup> for the dialect situation in the twentieth century. The change *j*->*g*- also appears in many of the German forms.

#### 5. *gicht* ‘arthritis’.

This variant of StDu. *jicht* is found in Middle Dutch and in some of the modern dialects. For its original \**j-* compare OFri. *jecht* ‘arthritis’, OHG *firgihtig*, MHG *vergiht(e)* ‘paralysed’, MLG *gycht*, MoHG *Gicht* ‘arthritis’. Some scholars have derived the word from *jicht* ‘confession’, as ‘an illness caused by a spell’, but I agree with EWN that this is semantically unconvincing (pace Weijnen/Ficq-Weijnen 1995: 115f.). A possible, though admittedly shaky alternative etymology could be to connect \**jixti-* ‘arthritis’ to PGm. \**jeka(n)-* ‘ice’, which belongs to a PIE root \**jeg-* for ‘ice’ also found in Celtic and Hittite (see Kroonen 2013: 273). Since cold weather typically worsens the pain of arthritis, ‘coldness’ would make a good naming motivation. Also, the painful feeling of arthritis may simply have been called ‘cold’.

The Middle Franconian Rhyming Bible has the past participle *uer gīhtigot* ‘lamed’ with word-initial *g-*. Early Middle Dutch displays once *gicht* (Cleves/Guelders, 1253), whereas a number of early West Flemish forms have a rounded vowel /y/: the noun *iucht*, the adjective *iuchtic, iuchtegh* and the abstract *ivchtichede* next to *jechtechede* (both in van Maerlant). A verbal form is the past participle *veriucht* ‘in pains’. The meaning of these forms seems not to be ‘lameness’ but ‘(torturing) pain’, ‘very painful’. In Late Middle Dutch, we find *gicht* (Holland 15th c., Limburg, NE-Dutch) and *iechte* (Flanders, 1405); the latter form could continue earlier *jucht* with unrounding.

Kiliaan (1599) knows both *ghichte*, which he calls German and Sicambrian, and *iechte*, which he says equals *gichte*. In the course of the seventeenth century, the written language develops a preference for *jicht*, which seems to be native to Holland at that time. We may conclude that *j-* is native to Flanders, Holland (though in the fifteenth century, only <gh-> is found there), and possibly also to Brabant. The occurrence of *j-* in Brabant is confirmed by modern Limburgian dialects, which show a clear-cut isogloss between western *jicht*, in Belgian Limburg, and eastern *gicht*.

64. [www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=26473](http://www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=26473).

The rounded vowel of *jucht* is not fully explained. Rounding of /e/ to /ø/ next to a velar consonant is well known for Flemish (e.g., *degone* ‘*degene*’, *joghen* ‘*jegen*’, see van Haverbeke 1955: 40f., Mooijaart 1992: 118), but rounding of short /i/ is not. One might assume that Flemish first lowered *jicht* to *jecht* and then rounded the stressed vowel to *jucht*. In support of this possibility, note \**plixti-* ‘plight, duty’, MoDu. *plicht*, which mostly gave Early MDu. *plecht* in Flanders and Brabant (van Loey 1976: 18) but also *plucht* in Flanders. The preponderance of <u> in thirteenth-century Flanders, however, is unexpected for such a scenario. Franck (1910: 63) proposes that *jucht* analogically adopted the rounded vowel of the verb ‘to itch’, West Flemish *jukken*, Standard Dutch *jeuken* (see § 15.3.2), and the noun MDu. *jucte*, *joocete*, MoDu. *jeukte* ‘itch’.

## 6. MDu. *ghien* ‘to confess’, *biecht* ‘confession’.

Proto-Germanic \**jexan* ‘to announce, declare, acknowledge’ (OS *gehan*, MLG *gēn*, OHG *jehan*, MHG *jehen*, *gehen*, OFri. *ia*) is attested in Old Dutch as *iehen* (MRB), 3SG. *giet* (WPs. glosses), and 3PL. *iehent* (LW). The compound verb \**bī-jexan* appears as *begin* (WPs.) and 3s. *beget* ‘worships’ (MRB). Its derivative \**bī-jixti-* ‘confession’ (OHG *bījih*, *bīght*, MHG *bīgīht*, *bīhte*, *begiht*, MoHG *Beichte*) occurs once in the Wachtendonck Psalter as *begihte*. Thus, Old Dutch has *j*->*g*- especially before the vowel *i* (assuming that 3s. *beget* reflects \*-*giēt*), whereas *j*- has remained before *e*.

After 1200, the simplex verb is attested in 3s.pres.sb. *ghied* (Zealand, 1254), in the weak past participle *gheghiet* (Zealand, 1300), and in the infinitive *ghien* (WFla., 1287). *Ghiën* is also the usual form of this verb after 1300. Initial *g*- is also predominant in the Middle Dutch compound verb, the oldest forms of which are *begien*, *begin* (Limburg, 1240). In the thirteenth century, all twenty-six tokens of this verb are from Cleves/Guelders, Limburg, and West Brabant. In the fourteenth century, *begien* is additionally found in the Flemish *Reinaert. Verghiën* ‘to declare’ (MHG *vergehen*, *verjehen*) is only found in Holland and Utrecht before 1300, but in subsequent centuries it also occurs in northeastern Dutch (data: CRM14 and MNW).<sup>65</sup>

The usual Middle Dutch form of the simplex abstract is *ghicht(e)* f. ‘confession’, with the derived verb *ghichten* ‘to declare’ and the adjective *ghichtich* ‘stating; acknowledged’. At all stages, *j*-variants are found beside *g*-: In the southwest and the northeast, *j*- seems to be particularly frequent: a variant *yechte* appears in Groningen, and Ghent provides the verb *yechten* and the nouns *ychtebrieve* ‘letter of acknowledgement’, *ychte dagh*, *yechte dagh* ‘statement day’. As in the case of Flemish *plecht* (see nr. 5 above), it is possible that *yechte* directly continues earlier *jichte*. *Yechtig* is also found after 1400 in Drente and Groningen. Plantin (1573) gives the verb as *jychten* or *iychten*, whereas Kiliaan (1599) only mentions *ghichten*.

<sup>65</sup> Possibly, then, *be-ghiën* and *ver-ghiën* were complementarily distributed in terms of their dialect geography.

as occurring in Frisia and Guelders. The geographic distribution of *g/j-* and *-e/i-* allows for the hypothesis that *jechte* stood beside *gichte*, that is, that *g-* only arose before *i*. That would match the Old Dutch distribution of *gi-* versus *je-* observed above (both for ‘arthritis’ and ‘confession’), but it would be contradicted by the development of *ge-* in the words ‘yeast’, ‘yon’ and ‘to weed’. This dilemma could be solved by adopting Franck’s proposal (1910: 93) that *jicht* and *jichte* were retained in order to avoid a sequence *gh\_ch* with two velar fricatives.

The nouns *bijgte* ‘confession’ and *bijgtere* ‘confessor’ (Limburg, 1240) show a contraction of \**bi-jixte* to \**bixte* which predated the rise of *g*. This contraction is confirmed by other dialects: Ghent *biichte(n)*, *bijchte* next to EFla. *biechte(n)*, WFla. *bijchte* next to *biechte*. West Brabant has *bichte* next to East Brabant *biechte*, and in Holland only *biechte* is attested. The form *biechte* must be due to phonetic retention or analogical restoration of the hiatus between \**bi-* and \**jixte*. The early contraction of \**bi-jixte* to \**bixte* implies that the form *begihte* in the Wachtendonck Psalter was built on the model of *be-gian*.

## 7. *gier* ‘yeast; liquid manure’.

A PGm. noun \**jēzō-* (to the root \**jes-* ‘to seethe, ferment’) is reflected in MLG *gare* ‘manure, yeast’ and Danish *gær* ‘yeast’, but OE *gyru* ‘manure’ (< \**jeru-*) and OFri. *jere* ‘manure’, MoWF *jarre* presuppose \**jerō-* with a short vowel (cf. Bremmer 2012: 134). The oldest Middle Dutch forms are *ghier* (1343–46, Holland), *eir* (/e:r/, North Holland, 1415), and *yer* (/i:r/, North Holland, 1531), see Pols 1885–1888 II: 354/119, 381/2. In the early twentieth century, this word for ‘manure’ was native only to northern dialects. It had the forms *gier* (South Holland, Utrecht), *ier* (North Holland), and *jier*, *jiere*, *jirre* (Groningen), cf. TNZN Map 1.7.

The geographic restriction of *gier* and its variants to Holland and Groningen points to a borrowing from the previous frisophone inhabitants of the coastal areas. In such borrowings, the vowel *ie* in Holland is often a reflex of Old Frisian long ē (cf. de Vaan 2010, Versloot 2012), but that would be in conflict with the short *e* attested in Frisian itself. Bremmer (2012: 134) proposes a new explanation for Hollandish *ie*. Since it is often the result of a regular local raising of earlier \*ē of various sources, he posits a preform \**jēr* for North Holland which did not have its long vowel from Frisian, but acquired it due to lengthening of short \**e* before *r* in medieval Hollandish. Other instances of the same change *er* > *ēr* > *īr* may be StDu. *vieren* ‘to loosen (rope)’, compare *veer* next to *verre* ‘far’, and the expression *op een kier* ‘ajar’ to *keer* ‘turn’, MDu. *kerre*. This is an attractive solution for the discrepancy between Frisian short *e* and Hollandish *ie*. In fact, the form *eir* from 1415 directly contains the intermediate stage (\**jēr* >) *ēr*. Initial *j-* was strengthened to *g-* in Holland (note that the combination /jī-/ would have been alien to the dialect), but in North Holland, it was lost. Heeroma’s attempt (1942b: 63–71) to explain *g-* in Hollandish *gier* from a prefix *ge-* is unconvincing.

## 8. MDu. *ghiemant* ‘someone; no-one’.

Dutch *iemand* ‘someone’ has the regular reflex *ie-* from WGm. \**eo-*, compare OFri. *ammon*, ī*man*, OS *eoman*, ODu. *ieman* (Leiden Willeram), Early MDu. *ieman(t)*, *iman(t)*, *iemen(t)*. The Middle Dutch variant *g(h)ieman(t)*, Early MoDu. *giement* (1644; Heeroma 1942a: 62), may be compared with initial *j-* or *g-* in MLG *jum-mant*, *jummende*, *gemant*, *gemants*. Since initial *g-* must have developed from *j-*, this presupposes an earlier, Old Dutch \**jeman* rather than the usual \**īoman*. A similar variation is found between Dutch *ieder* /idər/ and German *jeder* ‘every’ from *ieweder* < *eohwedar*. The syllabification *je-* is more frequent in German than in Dutch. Still, Dutch forms showing only *je-* are attested in Early MoDu. *jegelijk* ‘each’ (MoHG *jeglich*) < \**eo-galika-* and *jegewelc* ‘each’ < \**eo-ga-hwelika-*.

Most of the Middle Dutch attestations of *g(h)ieman(t)* ‘someone’ hail from Groningen, Drente, Fryslān, and Overijssel, but *g(h)ieman(t)* also occurs in (northern) Hollandish and even in Flemish sources. The origin of *g-* and the semantics of the word have been satisfactorily explained by van Haeringen (1938: 207–9). He argues that \**jeman* phonetically yielded *gēman*, whereas the variant *gieman* would have resulted from contamination with *ieman*.

## 9. Dialectal *gier* ‘udder’.

Two different but cognate preforms for ‘udder’ are continued in the Germanic languages: (1) PGm. \*ūdra- M., in OS *ūder*, MLG *uder*, OHG *ūtar(o)*, OFri. *ūder*, MoWF *oer* (‘teat’), OE *ūder*, MoE *udder*. (2) PGm. \*eudra- N., in OIc. *júr*, *júgr* N., MoIc. *júfur*, *júgor*, OS DAT.PL. *gederun*, MLG *jeder*, MoWF *jaar* N., MoCNFri. *jāāder*, *jāder*, *jaoder* (Sjölin 2006: 87) ‘udder’. In order to explain the co-occurrence of these two preforms, Kroonen (2011: 157ff., 2013: 120) reconstructs a Proto-Germanic neuter noun with ablauting paradigm, NOM.ACC.SG. \**eudur*, GEN.SG. \**ūdras*. The preform \**eudur* is reflected in Scandinavian, Frisian, Low German, eastern Dutch and Ripuarian German. The form in initial \**ū-* is found, roughly speaking, in English, in southern and central Dutch, and in High German.

The number of Dutch medieval attestations of ‘udder’ is extremely small, so that it will be best to start from the twentieth-century dialect situation as mapped and discussed in detail by Heeroma 1936, Map 13 of the *Taalatlas van Oost-Nederland en aangrenzende gebieden*, and Heeroma 1960: 55. Heeroma’s analysis is a good starting point but his expansionist theories must be modified on a number of points, as was already argued by van Haeringen (1937).

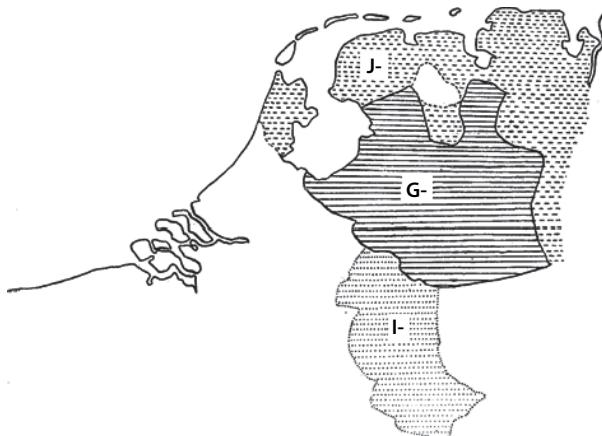
The main Modern West Frisian variant is *jaar*, to which correspond *joar* in Groningen and *jaar* in North Holland. In combination with the North Frisian cited above, we must reconstruct Old Frisian \**jāder* (Spenter 1968: 212). In North Holland, there are some attestations of a form *jadder* in the seventeenth and

eighteenth centuries, e.g., in the writings of Vondel. In northwestern Low German, between Emden and Norden, *jadder* is still found. Departing from PGm. \**eudr*-, the regular development led to OFri. \**jäder*, whence with *d*-syncope *jaar*, or, with shortening of the long vowel before *dr*, to *jadder*. This implies that the dialects of North Holland and Groningen have adopted the word for ‘udder’ from their Frisian substrate. Nearly the same northern coastal area uses a neuter *uur* /y.r/ (North Holland, Groningen) or *oer* /u.ər/ (Fryslân) for the ‘teat’ of a cow’s udder; in northeastern Overijssel this is referred to as *uder*, *utter*. It follows that PGm. \**üder*- also survived in these northern provinces, and that semantic specialization took place: \**eudr*- or the corresponding substrate word from Frisian referred to the whole udder but \**üder*- to the teats (Heeroma 1936: 125). This differentiation seems to go back at least to the time when Frisian was still spoken in North Holland.

An early attestation of *j-* is found in Kiliaan (1599), who calls *ieder* Saxon, that is, German. In modern dialects, initial *j-* outside Frisian is found in Groningen, Drente and in northern Low German. In Groningen, *jidder* ‘the udder of a slaughtered animal’ corresponds to *jidder* and *judder* ‘udder’ in adjacent Low German. The short vowels have developed from *jēder* just like *jadder* was shortened from *jäder*. In central Drente we find *judder* and in southeastern Drente *juur*, which Heeroma (1936: 121) explains as contaminations, viz. from *jidder* with *udder* and from *jidder* with *uur*. In view of their limited distribution on the border between several larger dialect areas, this explanation is conceivable. Initial *j-* also surfaces further south, in East Westphalian *jeier* (around Paderborn), which suggests that *j-* once prevailed in all of Low German.

Initial *g-* is found in a large compact area in central and eastern Dutch: *geer* in northern Utrecht, the Veluwe and in Twente, *gier* in the intermediate areas from Drente to the Rhine, *gedder* along the Vecht, *gidder* along the Eems. It occurs more sporadically in eastern Münsterland and very rarely in southern Westphalia. The etymological explanation by Heeroma (1936: 126) from a prefix \**ga-* is certainly wrong, because *g-* must reflect earlier *j-*. It does appear probable, as Heeroma (1960: 50) suggests, that the *g*-area has arisen *en bloc* within an earlier *j*-area, that is, *geder* < \**jeder* < \**ieder* < \**eudr*. In Middle Low German we already find *geider*, *geder*. Heeroma posits an original Westphalian focus area from which \**geder* spread to the west and northwest; that is possible, but our data do not allow dismissal of the alternative possibility of a local development *j- > g-* in Gelderland and Overijssel. There is a relic area with *ier* along the Vecht which may originally have been contiguous with the large Rhenish-Ripuarian area stretching from Cleves to the Eifel where we find *eder*, *ier*, *eer* and variants, cf. *RhWB* II: 215–7). Pace Heeroma (1936: 127), Rhenish *eer* and *ier* are best understood as regular reflexes of \**eudr*. This distribution suggests that all of eastern Dutch and western Westphalian once had \**eudr* >

\**eodr* > \**ieder*/\**eeder*, which then developed into \**jeder* in the intermediate area which later acquired *g*-. The Ripuarian nouns in *ee-* and *ie-* usually have neuter gender as opposed to the continuants of \**üdr*-, which are mostly masculine. It is possible that this difference is old and confirms the paradigm split suggested by Kroonen: the NOM.ACC. SG. \**eindr* remained neuter, whereas \**üdr*- from the oblique case forms became masculine.



Map 7. Simplified representation of the initial consonant of 'udder' in Westerlauwers Frisian, northern and eastern Dutch and northwestern Low German. Source: Heeroma 1942b: 72.

Western South Holland, Zealand, and West Flanders have *elder* or (rarely) *ulder*. It is likely that this variant was originally used in all of Flanders and maybe also in all of Holland. *Elder* is also found in central England, next to *ewer* in the north, showing that \**eldur* and \**eudur* must have coexisted already at the Anglo-Frisian stage (if western Dutch borrowed it from Proto-Frisian) or in West Germanic (if it was inherited in Franconian, too). Kroonen (2011) explains \**eldur* as the result of *u*-dissimilation in \**eudur*, which seems the best proposal so far.

Finally, reflexes of \**üdra-* (Sauerland *nür*, *nuder*), or *i*-mutated \**üdir* (see Kroonen 2011, who explains the *i*-mutation from the original locative) are found in central southern Dutch as MDu. *uder*, Early MoDu. *uder*, *uyder*, Modern Dutch *uier*. In the dialects of Flanders and Brabant, the difference between \**ü* without and with *i*-mutation has been obliterated by later developments. Most of the Limburgian dialects continue an *i*-mutated form \**üder*, usually with a long vowel or diphthong, but in southeastern Limburg it is *udder* with shortening before *dr*. In Belgian Limburg, however, we also find *ouwer*, with unmutated \**ü*-, and the same form also occurs sporadically in southeastern Limburg.

## 10. Limburgian *get* ‘something’.

Almost all of eastern Limburgian south of the Uerdinger Line (the *ik/ich*-isogloss), including the Meuse Valley in Belgian Limburg, uses the adverb *get* ‘something’ where Standard Dutch has *iets* /its/. The first attestation of *get* which I found is *ghet*, given as a variant of *iet* in *Teuthonista* (1477). Next, *get* is attested in 1640 by Jacob Kritzraedt for the dialect of Gangelt, and in a witness report from Stokkem from ca. 1660 (published in Fagot 1956). *Get* goes back to \**jet*, a dialectal form of Middle Dutch *iet* ‘something’, earlier *iewet*, from Old Dutch *iowiht*; compare OS and OHG *eo-*, *eowiht*. Within Dutch, Limburg is isolated in its acquisition of *g-*, but initial /j-/ is quite frequent in Middle Dutch. In the thirteenth century, we find *iet*, *yet* and *jet* in Holland (once *ijt*), mainly (*h*)*iet* in West Flanders (next to *yet*, *jet*, once *hiewet*, once *jeet*), *iet* and *it* in West Brabant (7x *iwent*), mainly *yet* in East Brabant, twice *it* in Limburg and once in Cleves, and *iet* in Cleves/Guelders. The spellings <*yet*>, <*jet*> and <*iet*> are ambiguous, their pronunciation could be either [iət] or [jet].

The type *jet* is also found in all of Ripuarian Franconian from the Uerdinger Line to the Eifel in Germany; compare the hand-drawn map in the *Sprachatlas der Rheinprovinz*, accessible at the website of the Digital Wenker Atlas, [www.regionalsprache.de](http://www.regionalsprache.de). Unfortunately, the map does not tell us which Ripuarian dialects have *g-*, though *Rheinisches Wörterbuch* mentions some sporadic occurrences. Of course, initial *g-* has become *j-* in many Ripuarian dialects (Aachen, Cologne, etc.), making it impossible to judge whether *jet* in such dialects has gone through a stage *get*.

## 11. *Gulik* ‘Julich’.

The town of Julich (German *Jülich*, from Latin *Juliācum*) is situated about 25 km northeast of Aachen. Its usual name in Middle Dutch is *G(h)uli(c)k* /yli.lik/, attested mainly in surnames. In Germany, modern surnames mostly have the form *Jülicher*, but *Gülicher* also occurs, especially in Aachen and east of Cologne. In the Netherlands, *van Gulik* is the most frequent form of the surname, found all over the country without a clear preponderance in one area. The name *Guliker* is concentrated in Nijkerk on the Veluwe, whereas *Gulikers* is mainly found in South Limburg. The form *Julicher* is found in Roermond and surroundings and is probably due to recent migration from across the state border.

#### 9.4.2 Summary

In conclusion, we can state that WGm. \**je-*, \**ji-*, \**jī-* have yielded *ge-*, *gi-*, *gī-* in all dialects, with the single exception of *jicht(e)* in which the retention of *j-* may be due to the following *ch*. West Germanic \**eo-* has sometimes developed into *ie-* > *je-*, which could also become *ge-*. The last change shows that the rise of *g-* from *j-* must (at least for these words) post-date the resyllabification of the Late Old Dutch diphthong *ie /ie/* to */je/* in word-initial position. Table 26 provides a summary.

The change of *j-* to *g-* before high front vowels could be interpreted as a dissimilation between *j-* and the next vowel. In articulatory terms, the pronunciation of *j* before a high (front) vowel is usually accompanied by more friction than before low vowels, as the tongue is lowered sooner in the latter case. Since initial *g-* was palatal(ized) before front vowels in many varieties of Dutch and German, it may be argued that the change of *je/i- > ge/i-* actually implies the identification of the fricative allophone of */j-/* with the voiced palatal fricative present in original *ge-, gi-*. This articulatory solution makes Franck's (1910: 93) explanation for the preservation of *j-* in *jicht(e)* even more plausible, viz. that it was caused by the avoidance of an initial syllable *\*[jɪç-]* with a (palatalized) velar fricative in both onset and coda.

Table 26. Results of initial *j- > g-*

WGm.		Area with <i>g-:</i>
<b>WGm. *<i>j-:</i></b>		
<i>geden</i> 'to weed'	* <i>jedan</i>	ODu.; SE Dutch (not attested elsewhere)
<i>gen, gene</i> 'yon'	* <i>jena-</i>	all of Dutch
<i>gij</i> 'thou'	* <i>jīz</i>	all of Dutch ( <i>je</i> and <i>jij</i> from reanalysis: * <i>gevet-gi</i> > <i>geved'i</i> , analysed as <i>t/d + j</i> )
<i>gest, gist</i> 'yeast'	* <i>jestā-</i>	all of Dutch
<i>gicht</i> 'arthritis'	* <i>jixti-</i>	all of Dutch ( <i>j-</i> in Fla.)
<i>giēn</i> 'to confess', <i>gichte</i> 'confession'	* <i>jexan</i> , * <i>jixti-</i>	all of Dutch; <i>yechte</i> in SW and NE, <i>bijgte</i> < * <i>bī-jixti-</i>
<i>Gulik</i> 'Julich'	<i>Juliācum</i>	all of Dutch
Frisian loan:		
<i>gier</i> 'manure'	-	Holland, Utrecht (< OFri. <i>jere</i> )
<b>WGm. *<i>eo-:</i></b>		
<i>g(i)eeman(t)</i> 'someone'	* <i>eoman</i>	NE-Dutch, Hol., Fla.
<i>gier, geer</i> 'udder'	* <i>eodur</i>	<i>g-</i> in central eastern Dutch, within a <i>j-area</i>
<i>get</i> 'something'	* <i>eowixt</i>	eastern Limburgian (MDu. <i>jet/iet</i> )

I adopt the viewpoint that PGm. \*g was a voiced stop which developed into a fricative in many West-Germanic dialects in different positions (Frings 1967), in spite of the position adopted by most scholars, viz. that Proto-(West-)Germanic had a voiced fricative in most positions (compare Moulton 1954: 24, Ringe 2006: 215). In anlaut, van Loon (2014: 197) assumes that fricativization in Dutch took place in the eleventh century, together with the voicing of initial *f*- > *v*- and *s*- > *z*- which created other voiced fricatives in word-initial position. This yields a probable date *ante quem non* for the identification of *j*- before front vowels with *g*-, although the occurrence of *g*- already in the Wachtendonck Psalter (10th c.) suggests a slightly earlier date. The fricative character of *g* and its allophonic distribution were shared by Old Saxon (Gallée 1993: 167–72), and, according to some scholars, by early Old English (Campbell 1959: 21, Minkova 2003: 113–20, Dietz 2006: 29–150).

## 9.5 Recent Frisian loans in North Holland and Groningen and other irrelevant evidence

Various coastal Dutch words in *s* or *z* which (seem to) correspond with inland Dutch words in *g* or *k* have been claimed to show palatalization of velars. A very extensive collection was presented by Kieft 1945, but Schönfeld & van Loey 1970 also acknowledge a number of forms. As I will argue below, many forms must be interpreted differently, in particular the Flemish evidence. In North Holland and Groningen, Frisian was spoken into the Late Middle Ages, which is why more palatalized forms appear there. Their possibly recent (that is, Late Medieval) adoption in the coastal dialects disqualifies them as evidence for language contact between Proto-Frisian and Old Franconian in the Early Middle Ages. I will not deal with the evidence from Groningen, as the number of palatalized forms is much higher. The shift from Frisian to northeastern Dutch dialect was relatively recent in Groningen (in the 1400s). For collections and discussion of the evidence from Groningen, see Heeroma 1951b, Heeroma & Naarding 1961, Feenstra 1998: 61–78, Niebaum 2001: 439–40. For a research overview of Groningen speech in the Middle Ages, see Reker 2002: 63–71.

### 9.5.1 Not restricted to coastal Dutch

Three forms have a wider distribution. Dutch *lenzen* ‘to sail before the wind with little sail’ was interpreted by Kieft (1945: 179) as a derivative from a putative noun \**lenze* ‘length’ < \**langin-*, compare German *Länge* ‘length’. It is just a guess, however, that *lenzen* would have anything to do with sailing ‘lengthwise’. The earliest attestation of the verb as *lenssen*, *lentsen* ‘to make loose’ in 1599 (Kiliaan) points in a different direction, viz. to a derivation from the adjective *lens* ‘slow, weak’ (see EWN s.v. *lens* 2, and *lenzen* in WNT).

West Flemish *meuzie* ‘midge, mosquito’ was mentioned by Kieft (1945: 179) as a possible instance of palatalization of \**g* before \**j*, since Dutch *mug* ‘midge’ goes back to WGm. \**mugjō-*. However, the sibilant in *meuzie* was not originally restricted to Flemish, and there is no trace of an original velar consonant in this word. We can therefore be certain that *meuzie* had *s* all along and does not represent the same etymon as *mug*. All of southern and western Dutch displays forms of the type /mø.ziə/, compare Early MDu. *moesie* (West Limburg, 1291–1300), plur. *muesien* and *messien* (both WFla.), Early MoDu. *meuziën* (Ghent, 1566), *meusie*, *mosie* ‘midge’ (Kiliaan, 1599). Van Ginneken et al. (1938: 336) provide a map of the distribution of *me(u)zie* versus *mug* in modern southern dialects. The former appears in the southern half of East Flanders and in adjacent parts of eastern West Flanders and southwestern Brabant. A more detailed map is offered by WVD, ‘Land- en waterfauna’, p. 153. The type *meuzie* is now found in the south of West and East Flanders, and cognate forms such as *meus/meuze*, *muis* and unrounded *mees* surface in southwestern Brabant. With an additional suffix, *meuzik* appears in a few places in the northwest of North Brabant.

Dutch *smetsen* ‘to smack one’s lips, tuck in’ is regarded by Kieft (1945: 177) and, with more hesitation, by Schönfeld & van Loey (1970: 240), as a palatalized reflex of \**smakjan*; compare with geminate *kk* and a similar meaning MDu. *smecken* (1539 Brabant), dialectal Dutch *smekken*. With *ts* the verb is attested in Kiliaan (1599) and in a number of Early Modern literary sources. The oldest forms in *ts* are found in Brabant and Holland, not in Flanders. This makes it likely that *smetsen* belongs to MDu. *smetten* ‘to stain, make dirty’ (compare *smette* ‘stain’), with the *s*-suffix that is sometimes found in expressive or frequentative verbs, as discussed by Schönfeld & van Loey (1970: 239f.). Well-known examples of this type are *kretsen*, *kratsen* to *kretten* ‘to scratch’ and *splitsen* to *splitten* ‘to split’. *Smetsen* is used for ‘tucking in’ on food, ‘to binge’, which evokes the image of ‘messing about’ (to *smetten*).

### 9.5.2 *s* for *k* in North Holland

We find a small but reliable number of palatalized forms in North Holland. As this area shifted from Frisian to Franconian around 1200, and as most traces appear in toponymy, we are surely dealing with Frisian loanwords into the Hollandish dialect (see van Bree 2012).

*Beseeuwen* ‘to be bewildered, faint’ was mentioned by Kieft 1945: 173 as a palatalized variant of Early MoDu. *bekeeuwen* ‘to faint’, to Dutch *keeuwen*, *kieuwen* ‘to gasp for air (of fish); to chew’, which has *k-* also in North Holland. The prefixed verb is known from all over North Holland as *beseeuwen*, *bezeeuwen* ‘to swoon’ (Boekenoogen 2004: 46, Karsten 1931–34 II: 200, Pannekeet 1984: 37). Yet in Modern West Frisian, the corresponding verb is *besauwe* ‘to be amazed’, with *s-* which cannot represent old *k-*. Hence, the etymology proposed by Boekenoogen for *beseeuwen*, viz. derivation from the word for ‘sea’, is more likely; compare also Holl. *verzeeuwd* ‘seasick’.

*Sermen* ‘to moan, groan’. Dutch *kermen* from *karmen-* ‘to moan’ is found as *sermen* in North Holland (Boekenoogen 2004: 467, Pannekeet 1984: 300). For the palatalized reflex, compare MoE *chirm*, and MoWF *tsjirmje*, dial. also *kjirmje*, *tjirmje*, *tsjirmje* < Anglo-Frisian \**kärm-*. Nowhere in Frisian do we find the reflex *ts-* or *s-*, and even *tsj-* seems to be a recent development from *tj-*. Thus, the North Holland form must either go back to a now extinct dialect in which the palatalization had proceeded further than in Modern Westerlauwers Frisian, or it is due to the adaptation of Frisian *tj-* as Dutch *s-*.

*Tseen, sjaan, sien* ‘chine’. The noun *kene* ‘small stream’ < PGm. \**kinan-* (OE *cinu*, -*an* ‘crack, fissure’, ME *chyne*, MoE *chine*) is attested with *k-* in all Dutch toponyms which contain this noun: ODu. *Kinlosun* (9th c.), *Chinnelosara gemerchi*, *Westerkinloson*, etc., and modern *Keent* in Brabant, *Keen* near Zevenbergen and Klundert (NBr.), *Kortgene* in Zealand from *Kortekine*, *Keenwatering* (Delfland), *Grote Keinse*, *Kleine Keinse* near Schagen in North Holland, etc.; see Muller 1936: 40, de Cock 1980, Miedema 1972, 1980a. An exception carrying *s-* is *Polder de Sien* in Uitgeest, south of Amsterdam.

The latter form corresponds to the appellatives in *s-* or *ts-* as found on the islands off the coast of North Holland: Wieringen *sjaan* ‘small gulley for drainage’, Texel *tseen*, Terschelling *sien*. They seem to show the same palatalization as in the Frisian toponym *'t Sein* (from *kein*) but may alternatively represent relicts of OFri. *ūtsiāne*, *ūtsiōne* ‘water course, outlet’ (Miedema 1972, Buma 1982). This interpretation implies that North Holland *Kin-losun* and *Keinse* have Franconian rather than Frisian phonemics, a conclusion supported by the reflex <*o*> rather than <*a*> from \**au* in *Kinlosun*. See below on *Keinse*.

*Beets*. The village of *Beets* (1481 *Beets*, 1494 *Beetsch*), southwest of Hoorn, represents the Frisian development of *beek* ‘brooklet, stream’ (WGm. \**baki*) to *Beets* as it is found in Fryslân too.

### 9.5.3 *s* and *j* for *g* in North Holland

*Kallens(oog)*, *Callantsoog*. *Kallens-* contains the place-name suffix \*-ingja-. Old attestations are *Callinge* (1083 falsum 12th c.), *Kallinge* (1125–30 copy 14th c.), and *Calense* (1396). From the survey by Gildemacher (2008: 101–44) of all medieval and later attestations from Fryslân, it is clear that spellings of this name in *ns*, *nz* only start to appear in the fourteenth century, all older attestations retaining <ing>. The attested forms of North Holland *Kallens* comply with this date. Probably, the earlier spellings with <ing> were already pronounced with a palatalized velar.

*Keinse* is the name of an inhabited mound near Schagen in North Holland. Older forms are 1319 *bi der Kaense*, 1388 *twischen den Oghe ende der Kaynse*, 1557 *de Groote Keysn*. Miedema (1980a: 211) reconstructs earlier \**Kenenze* from \**Kiningja*- . Possibly, *Keinse* was a hybrid formation, with the Franconian stem \**kene* and the Frisian suffix -enze.

*Lanis* is a regional variant of *lanings* (Pannekeet 1984: 199, Boekenoogen 2004: 291), the plural of *laning* ‘board, flooring’. The ending -is is not due to palatalization, but to (dissimilatory?) loss of the nasal in -ings.

*Wadwaai* (below Wognum) contains the noun \*-weg ‘way’. The palatalization of word-final -g is irregular in Franconian but normal in Frisian, compare OFri. *wei* ‘way’.

There is no indication for a Frisian origin of *zeunis* ‘pigs’ trough’ (Pannekeet 1984: 414, Boekenoogen 2004: 619, Weijnen 2003: 428). The forms *sony* (*Teuthonista*, 1477) and *suenie*, both probably for /sø:nɪ/, with a plural in *n*, are attested from Late Middle Dutch onwards. Kiliaan mentions *suenie* for the regions Holland and Guelders. Other variants are *zeuning*, attested in 17th-century authors from Holland, and *zeunis* in North Holland. Map 1.11 of TNZN provides the dialectal variants for the earlier twentieth century. We find *zeunis* in northern North Holland, *zeunie* in Zaanstreek and Waterland, and *zeuning* in a large central area which includes the northeastern half of South Holland, the whole province of Utrecht plus the Gooi, and the Rhine/Lek area. A single attestation of *zeunings* is found in the north of North Holland. A smaller area with a short vowel, in *zunnie* and *zunnië*, appears between Arnhem and Zutphen and around Doetinchem in Gelderland. Thus, whatever the exact etymology of this noun (to \*swōnō- ‘expiation’, \*swōnjan- ‘to expiate, offer’? the connection with OE *sunor* ‘herd (of pigs)’ is formally difficult and semantically as well), *zeunie* and *zunnie* must be regarded as the oldest forms, which changed to *zeun-ing* by suffix replacement. The s-form *zeunis* is best explained from a plural *zeunings*.

### 9.5.4 Flanders

Two Flemish toponyms probably show Romance palatalization. *Semmerzake* is located in East Flanders, south of Ghent. The oldest, Romance spellings of the initial sequence have <ci>: *Cimbarsaca* (815 copy 941), *Cimbresac* (977), *Cimbresacra* (988 falsum ca. 1000), *Cimbersaca* (995 copy mid 11th c., 1148), *Cimmarsaca* (1088). From 1100, the vowel appears as <e> and we find alternative spellings for the initial consonant: *Cembersaca* (1110), *Cembresaca* (1123), *Schemessake* (1101 copy 1176–1200), *Scemersake* (1101 copy 1176–1200), *Semmersake* (1163 copy 12th c.), *Tsemmersake* (1163 copy 12th c.), *Sembersake* (1169 copy 12th c.), etc.; see Gysseling 1960a, Tavernier-Vereecken 1968: 497, Besse 1997: 489–90. The lowering of *i* is frequently found in Late Old and Early Middle Flemish, cf. *temberman* < *timberman* ‘carpenter’, *Grendberga* < *Grindberga*. Whereas an initial sound [ts-] could in theory reflect an early palatalization of the Proto-Frisian type, it seems much more likely, considering the geographic area, that we are looking at a Gallo-Romance name which was incorporated into Old Flemish. Mansion (1924: 126, 217f.) suspects that *Semmerzake* continues an originally Celtic name in \*-āko-, as found in other southern Dutch names in -aken. Gysseling (1960a: 909) suggested deriving \**Cimbrasiacum* from a Roman personal name \**Cimbrasius*, but such a name is unattested. Another toponym which may have the same etymology is *Cambresèque*, south of Calais in France. It is attested in 1087 as *Kimbreseca*, *Cabresecque* (Besse 1997: 490).

*Serskamp* is another place-name from East Flanders. The oldest form is *Cerscamp* (1148 copy end 13th c.); other earlier spellings are *Scerskamp* and *Scherskamp* (1242), *Cerschamp* (1246), *Serscamp* (1265 and 1352), *Sarskamp* (1384), *Tsheerscamp* (1398), *Cierskamp* (14th c.), *Cheerscamp* (1432), *Tseercamp* (1545), *Serscamp* (1572); later generally *Cherskamp* (Tavernier-Vereecken 1968: 498). The modern dialectal pronunciation is [ʃe.əskam]. The spelling variants clearly point to a palatal affricate or fricative in Early Middle Dutch; a similar variation is found in some French loanwords, such as MDu. *tsaerter*, *chaertre* ‘charter’ (see § 9.1.2). The older explanation as ‘cherry-camp’, with an assilated form of MDu. *kerse* ‘cherry’ from Latin *cerēsia*, is problematic because ‘cherry’ is not otherwise found with palatalization in Dutch, Frisian or German (*kers*, *Kirsche*). Hence, *Serskamp* cannot date back to the Roman period (as per Debrabandere et al. 2010: 224). If it does contain the word for ‘cherry’, *Serskamp* could be a Gallo-Romance settlement called ‘Cherryfield’, founded during the Middle Ages.

None of the other Flemish forms for which palatalization of a velar has been claimed can be maintained. The word *beek* ‘brook’ < \**baki*, genitive \**bakjas*, as a second element of toponyms, is sometimes found with a spelling <ch> or <s> which suggests palatalization: *Borsebeche* (1220) ‘Borsbeke’, *Nerebache* (966 copy

15th c.) ‘Meerbeke’, *Albeche* ‘Aalbeke’ (WFla., 1175), *Bichengem* (1107) ‘Bekegem’, *Harlebecche* (1186) ‘Harelbeke’. There can be little doubt that these are French spellings reflecting the Gallo-Romance palatalization of \**baki*, as found in place-names in French *-baix*, such as *Roubaix*.

Kieft (1945: 175) draws the attention to West Flemish *blessen* ‘to debark a tree; to look threateningly, show the white of the eye; to bark (of a dog)’. This corresponds to Early MoDu. *blecken* (1599), Du. *blekken* or *blikken* from PGm. \**blakjan-* ‘to bleach’. In fact, the same West Flemish dictionary (de Bo 1892: 146–8) which aduces *blessen* also has *blekken* as the more usual variant of the verb. This makes an explanation of *blessen* from an early palatalization implausible. The noun *blesse*<sup>66</sup> can refer both to a ‘debarked place on a tree’, a ‘bald patch on a man’s head’ and to a ‘blaze’ on the forehead of a horse or cow. The latter meaning is the usual one for Early MoDu. *blesse*, StDu. *bles*. The same word also occurs as an adjective in MDu. *bles*, *blese* ‘having a blaze’. Dutch *bles* and *blek* both have the meaning ‘blaze’ and ‘the white of the eye’. Hence, it seems likely that the verb *blekken* ‘to bleach’ and the noun *blesse* ‘blaze’ have influenced each other in Flemish, giving rise to a verb *blessen* with the meanings of the noun *blesse*. The closely related dialects of Zealand (WZD 106–8) show the more original distribution, with *kk* in the verb and *s* in the noun: *blekken* ‘to shine; show one’s teeth (of a dog)’, *blikken* ‘to shine up; mark a tree’ next to *blis kieken* ‘to look scared (showing the white of the eye)’, and *blis(se)* ‘blaze’ on a horse’s head.

The town name of *Bruges* is attested in Old Dutch both with the Dutch development of \**bruggjō-* to /brygge-/, as in *Bruggas* (840–75, on Carolingian coins), *Bruggis* (11th c.), *in porto Bruggensi* (ca. 1010), and with retention of *j-* and later the rise of an assibilated cluster in *Bruccia* (840–75, coins), *Bruciam*, *Brucciam* (892 copy 11th c.), *in Brutgis vico* (end of 9th c. copy 941), *Bruzias* (1051–1100 copy 13th c.), *Brutgensis* (1111–15). We can safely regard the second group of forms as reflecting the French pronunciation, as was already concluded by Tavernier-Vereecken 1968: 364.<sup>67</sup> In view of the international fame of Bruges, the continued transmission of the name in the nearby Gallo-Romance area is not surprising. Note that none of the other Old Flemish place names in *brug* ‘bridge’ show any sign of palatalization.

66. Possibly, the earliest attestation in Dutch is the name *Johannes Blesse* in Calais, 1298 (Gysseling & Bougard 1963: 17).

67. “elk spoor van zulk een assibilatie (...) wordt slechts aangetroffen in M[iddel]lat[ijnse] teksten, geschreven in Noord-Frankrijk of in Vlaanderen. Derhalve lijkt het vooralsnog aangewezen die geassibleerde vormen voor Frans te houden, speciaal Fra. leestaalvormen.” [“every trace of such an assimilation (...) is only attested in Middle Latin texts, written in Northern France or Flanders. Hence we are for the time being bound to regard those assimilated forms as French, in particular, as forms from French written language.”]

The locality of *Butsegem* in West Flanders, close to the Hainaut border, is found twice as *Bucingeheim* (965 falsum 990–1035; 966). Probably, <c> is to be read as [ts]. Another place-name with the same anthroponym is *Bussenghem* (1227) in East Flanders, which has secondarily developed a voiced /z/ in the modern pronunciation. It has been suggested (Schönfeld & van Loey 1970: xxix, Tavernier-Vereecken 1968: 211) that *Bucingeheim* can be compared to English *Buckingham* and that it would show palatalization of a hypochoristic name \**Bukkan-* in Flemish. Yet Mansion (1924: 33, 94) regards *Bucingeheim* as a derivative of a hypochoristic name \**Butsa* < \**bud-san-*, with the s-suffix added to a stem in a dental. This name is attested as Old Dutch *Bozo* (Liège 1080, cop. ca. 1700) and indirectly in its derivatives *Bozelini* (Sint-Truiden, 1006–23 copy ca. 1250), *Buzimanni* (GEN.; Douai?, 1067), see Marynissen 1986: 82. Mansion's etymology seems preferable over an isolated case of palatalization.

A noun \**friskinga-* ‘young piece of cattle, piglet, lamb’ (MDu. *versching*, OHG *frisking*) is attested once in the Old Ghent documents as ACC.SG. *frisingiam* (801–900 copy 941). The spelling with single *s*- instead of *sc* or *sk* leads Mansion (1924: 179) to assume French influence on the spelling of *frisingiam* because the cluster *sk* is normally retained in Old Dutch; compare Old French *frésange*. We do find a graphic representation of the cluster /sk/ in all other fifteen Old Dutch attestations. It follows that the ending *-giam* may also reflect the French pronunciation of the word, and cannot be counted as evidence for Dutch palatalization.

The form *geldindas* ‘castrated ram’ (801–900 copy 941) stands for NOM.ACC. PL. \**geldingas*, as proven by the NOM.PL. *geldingi* (801–900 copy 1060); it is derived from *gelt* ‘unfertile’. Schönfeld & van Loey regard *-nd-* as the reflex of a palatalization of *-ng-*, but Mansion (1924: 163) simply assumes that *d* in *geldindas* is a mistake for *g*.

*Krensen, krinsen* (also written and pronounced with *z*) means ‘to winnow grain’, ‘to clean grain by passing it through the winnow’. The word is used figuratively for ‘to wriggle the body for pain, cold or itch’ in various dialects, among which is Flemish (see WNT s.v. *krensen* and *kranselen*). The same meanings ‘to winnow’ and ‘to wriggle’ are attested for the frequentative *krinselen*, *kranselen*. Hence, this verb has nothing to do with *kringen* ‘to turn’ or palatalization of *g*. Debrabandere (2011: 214) derives *krensen* and variants from Old French *crincier* ‘to winnow’, which is much more attractive.

The verb *ve(i)nzen* ‘to smoulder’ is adduced by Kieft (1945: 179), de Tollenaere (1957) and Schönfeld & van Loey (1970: 240, with hesitation) as a possible case of palatalization. The verb is restricted to Flanders. Modern dialects show several forms: *venzen*, *veizen*, *vinzen*, *vunzen*, *veuzen*. The forms with a nasal are the more original ones, as they are already found in the sixteenth century: *veinsen* (Lambrecht 1562), *venzen* (1567), *geveinsd* (1568). The diphthong *ei* represents a regular development of *e* before *n* plus a dental obstruent. *Vunzen* has rounding

after *v*, whereas in *veizen* and *veuzen*, the nasal was lost. In my view, *venzen* is best explained from an *s*-verb \**veng-sen* to \**veng-* ‘to kindle’, compare MHG *vengen* ‘to kindle’ < \**fangjan-*, as opposed to MHG *fenken* < \**fankjan-*, MDu. *ontfenken* ‘to ignite’, southern Dutch *vincken* ‘to smoulder’ with *k* (Kroonen 2013: 127). On Dutch, and in particular West Flemish presents in *s*-, see van Loey 1958.

## 9.6 Summary and conclusions

It turns out that we can distinguish between two main groups of evidence: changes due to palatalization in a *TK*-cluster, and changes which involve the phonetics and phonemics of /g/ and /j/. There is no independent palatalization of \**k* other than in the clusters *dk*, *tk*.

- a. The palatalization in *TK* can be viewed as the direct and trivial result of cluster simplification. It is not confined to coastal Dutch, nor was it caused by the quality of the vowel following the velar consonant.

The earliest forms concern *dg* > *dj* in the Old Dutch names in *Gard(is)* which are restricted to coastal Dutch (in Flanders from 948, in Holland and Zealand evidenced after 1200). In the thirteenth century, the combination *te gegen* ‘against’ has developed to *tjegen* (palatalization) whence finally *tegen* by cluster simplification. This happened in various dialects across the Low Countries. A different result of *tegegen* was *jegen*, which, at least in eastern dialects, came about by metanalysis of the intermediate stage *tjegen* as consisting of *te+jegen*. The same metanalysis may have happened in Flanders independently and a little earlier (shortly after 1200), unless Flemish *jegen* arose from a dissimilation of the first *g*- in original *gegen*. Another palatalization of *g* after dentals led to the rise of *je* and *jij* ‘you’. Unstressed *je* developed in the fourteenth century from 2PL. *gi* ‘you’ in inverted combinations with the corresponding verb form ending in *-t*, e.g. \**gevet-gi* ‘you give’ > *geved'i*. The palatalized dental developed into a cluster [dʒ] which was phonetically reduced to *j* or was reanalysed as *t/d + j*. Stressed *jij* first appears in 1550 and was probably formed by analogy with *me*, *mij* ‘me’, *we*, *wij* ‘we’. The *j*-forms are restricted to coastal Dutch (including southwestern Brabant), which may be due to the contemporaneous existence of palatalized allophones of the dental stops in Brabant and Limburg versus their absence in the west.

The origin of the diminutive suffix *-tje* from palatalization in clusters *dk* and *tk* has been proven by Marynissen (1998). Palatalization happened in different regions across the Low Countries independently between the thirteenth and the sixteenth century. Partly, these differences may have been caused by different timing of syncope of the (first) schwa in the suffix *-ekin* > *-eken*. The syncope of

- an unstressed schwa was also the condition for the palatalization found in the place-name *Kortgene* and for southern Limburgian *aetje* ‘vinegar’ from *edeke*.
- b. A number of developments, all of which are also found in parts of Low and/or High German, affect West Germanic \*g. They presuppose its status as a voiced velar fricative [ɣ], at least in anlaut and inlaut. It may also be assumed that /g/ had a palatal allophone [j] before i, e and a velar allophone [ɣ] before a, o, u. It is likely that the palatal [j] also occurred between i, e, a and a consonant or an unstressed vowel.

In word-internal position, there are four different contexts in which palatalization to j took place. 1. The oldest change (from 800) is that of Old Dutch and Old Saxon \*egi to ei and of \*igi into ī in compound names. Probably, between two front vowels, [j] phonetically became [j], and [eji] and [iji] were interpreted as /ɛɪ/ and /i/. 2. A subsequent change of \*egC to eiC was regular in all Early Middle Dutch dialects (*breien* ‘to knit’, *seide* ‘said’, etc.). In paradigms with an alternation between Old Dutch \*egR and \*egeR, the result eiR appears to have been generalized only in western Dutch dialects. 3. Words which had \*a/e/igeC throughout the paradigm in Late Old Dutch could syncopate the unstressed vowel if it was followed by one or more syllables. When syncope took place, palatalization to eiC occurred more frequently in western dialects than in the east (e.g. *eide* vs. *egede* ‘harrow’, *heinen* vs. *hegenen* ‘to fence’), though some exceptions with ei are also found in the east. 4. A few words show palatalization of word-final -g in western dialects (*kei*, -*Dei*, -*eie*).

In all of these cases, we may assume that original [ej] merged with the already existing combination /ɛɪ/. There was no discernable difference in phonetics between western and eastern Dutch, and for the oldest developments (nr. 1 and 2 above), eastern and western Dutch provide an equal amount of evidence. We do find that coastal Dutch more often generalized eiR from alternating paradigms (nr. 2), more often syncopated the middle syllable of trisyllabic forms, leading to eiC (nr. 3), and is the only region to show palatalization of word-final -Vg (nr. 4). The first two differences have their origin in different syncope patterns or in different morphological preferences, whereas only the last one might show an older, possibly Frisian/Franconian dialect difference.

In word-initial position, g- is usually retained in Dutch before front vowels. The only exception is the unstressed prefix \*ga- in past participles and collective nouns. In Early Middle Dutch, this appears as ye- or i- in part of West Flemish. In modern dialects, initial ə- occurs in Flanders, Zealand, Holland, and in parts of Overijssel and Gelderland. Probably, these areas experienced a shift of \*ge- > \*je- > \*i- > ə-. The initial shift of g- to j- was either dialect-internal, and motivated by the phonetics of unstressed [je-], or it was due to the language contact process between Proto-Frisian and Franconian in the coastal area.

The mirror image of the change from *\*g* to *j* is the exceptionless change of word-initial *\*j-* to *g-* before stressed *\*i*, *\*ɪ* or *\*e* at the Old Dutch stage. This fricativization occurred in all dialects. *J-* has also become *g-* in one Frisian loanword in Holland and Utrecht (*gier*) and in a few words in which the diphthong *\*eo-* did not become Early Middle Dutch *ie-* but *(\*)je-*. The change of *je/i- > ge/i-* can be interpreted as the identification of the (more) fricatival allophone of */j-/* before front vowels with the voiced palatal fricative [j] in original *ge-, gi-*.

The general conclusion of this section is that, on chronological and geographical grounds, few of the reviewed palatalizations qualify as (influenced by) Proto-Frisian or can be linked to the difference between western and eastern Dutch, see Table 27. As a result, the Dutch palatalizations do not have any bearing on the subgrouping of West Germanic.<sup>68</sup> Only the sporadic palatalization of word-final *-Vg*, and possibly the palatalization in the prefix *ge-*, might result from the Frisian-Franconian language contact in western Dutch.

**Table 27.** Summary of the consonant phenomena reviewed in Chapter 9

Change	Coastal vs. inland Dutch	Status in coastal Dutch
palatalization in TK-clusters	no	internal development
<i>g &gt; j</i> before <i>i,e,C</i>	no	internal development
<i>-Vg &gt; -Vj</i>	yes	imposition from PFri.?
<i>*j- &gt; g-</i> before <i>i, ɪ, e</i>	no	internal development
<i>*ga- &gt; je-</i>	partly	imposition from PFri.?

A second conclusion is that there is no meaningful way to connect the palatalizations of *g* with the modern distribution of its allophones. As is well known, Modern Dutch has for the phonemes /g/ and /x/ the voiceless allophones uvular [χ] or pharyngeal [ħ] in western and northern dialects (mostly the same pronunciation indistinctly for both phonemes), versus palatal voiced [j] and voiceless [ç], respectively, in the south and southeast. If anything, the indiscriminate palatalization of *g* before a consonant in both western and eastern dialects as well as the general fricativization of *j-* before front vowels in all dialects, point to all dialects having a palatal allophone before front vowels up to Early Middle Dutch. That includes western and northern dialects which now typically have a uvular allophone. It follows that the modern distribution of allophones is due to a reorganization of the original, vowel-conditioned distribution per region: the west generalized the

68. An indirect connection of the Dutch palatalizations of *g* with similar events in Frisian and English remains a possibility if one assumes that Anglo-Frisian merely phonologized fronted West Germanic allophones earlier and much more pervasively than did Dutch and German.

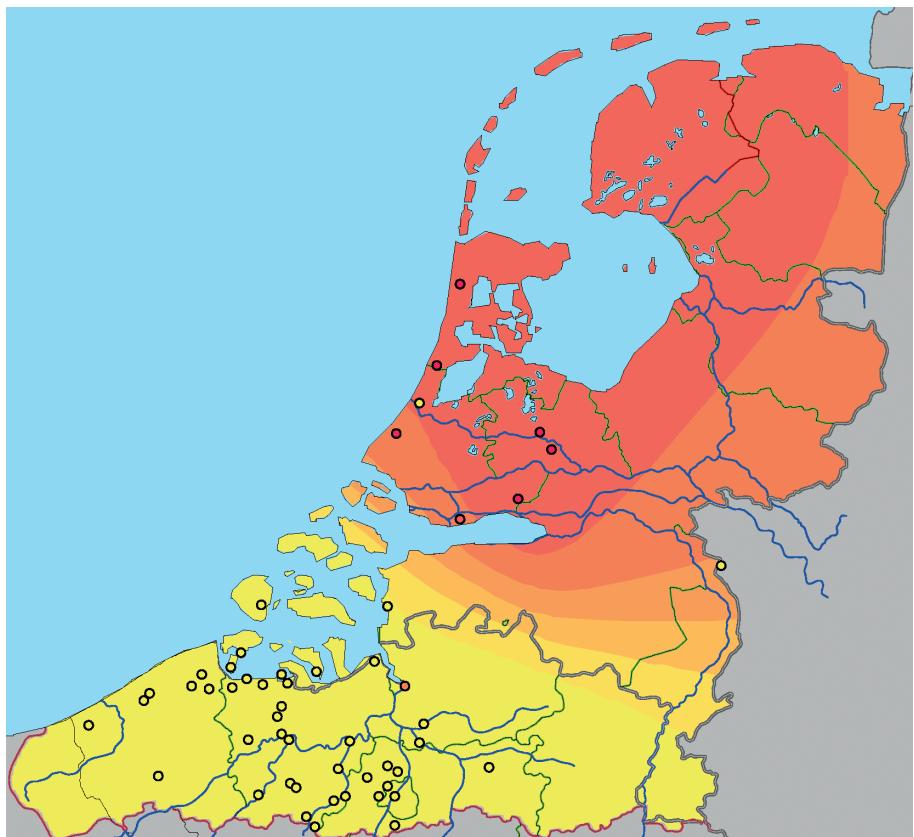
velar allophone (which became pharyngeal in parts of Flanders and Zealand, and uvular in parts of Holland and the northeast), the southeast generalized the palatal pronunciation (Goeman 1998: 217). Our data imply that this redistribution of allophones post-dates the Early Middle Dutch stage.



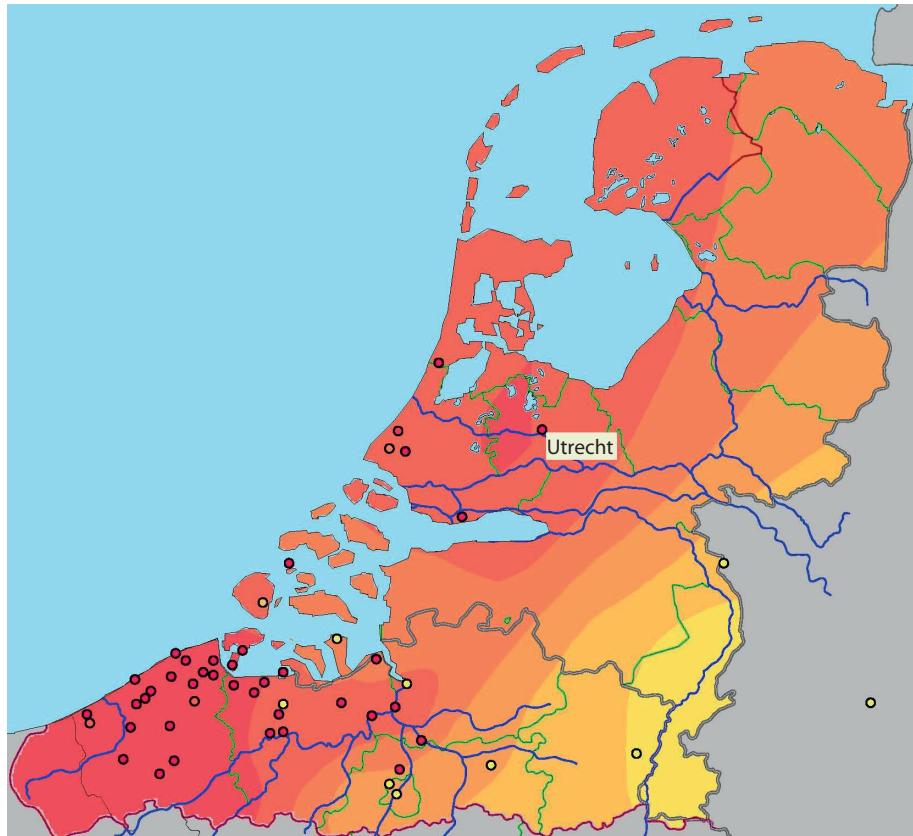
## Other issues involving consonants

### 10.1 Retention of *ft*

A typical characteristic of Modern Dutch is the reflex *xt <cht>* from WGm. \**ft*, as opposed to the retention of *ft* in English, Frisian, and Modern High German. For Dutch, van Loon (2014: 236) dates the change to the twelfth century based on toponyms.



Map 8. *kopen* in VMNW



Map 9. *ghijfte* in VMNW

Van Loey (1976: 99–101) formulates the following sound change: *ft* became *xt* after a short vowel, but remained after a long vowel or a consonant. This rule has not been adopted by subsequent handbooks, and probably rightly so, since several dialects preserve long vowels before *xt < ft*, such as *zacht* ‘soft’ and *zuchten* ‘to sigh’. Van Loey’s examples of retained *ft* can be due to analogical restoration of *f* (*heft* ‘half’ to *half*, *dorfte* ‘needed, dared’ to *dorven*, *vijftich* ‘fifty’ to *vijf* ‘five’) or involve *ft* that arose by syncope, as in *heeft* ‘has’ from *hevēt*, and *hoofd* ‘head’ from *hoved*.

In place-names with a relatively clear etymology, most instances of *xt* appear in the twelfth century at the earliest, viz. in Hocht (Limburg): *Huste* 952, *Hufte* 929–62, *Hothe* 1212, *Hochte* 1221; Kachtelgaver (EFla.? and if from \**kaftel-*): *Cactelegauer* 1171; Lichtaart (Antwerp): *Lifterde* 1146, 1186; Lichtervelde (WFla., from \**luftar-feld-*): *Lichtervelda* 1127; and Ochtezele (dept. Nord, France, \**Uftinga-sali-*): *Ohtingesale* 1183, *Uhtingesela* 1187. The toponym *Gundinisgrabt* (1144, EFla.) ‘Gundin’s ditch’ retains *ft* in the middle of the twelfth century (Tavernier-Vereecken

1968: 589). The earliest appellative showing \**ft* > *cht* in Flemish is *achtinhe* ‘confiscation’ (Ghent, 1176–1200) from \**haftinge*.

The tenth-century Wachtendonck Psalter mostly preserves *ft*, but in a few cases we find <*ht*>, in \**hahtnodi* ‘imprisonment’ (in glosses), *senihte* ‘softness’ (once in a gloss, versus *senifti*, -*e*), *stihtan* ‘to found’ (in glosses, vs. *gestiftoda* in Psalm 68). Since *ht* is only found in glosses, it may have entered the text during the textual transmission and not be original.

Nevertheless, it is possible that southeastern Dutch implemented the change to *xt* earlier than the dialects to its west. In neighbouring Old Saxon and Moselle Franconian, *ft* > *xt* is found already in the tenth century (Lasch 1913: 153, Braune & Reiffenstein 2004 § 139 Anm.7). This date suggests that the change spread from the interior of the continental West Germanic dialect continuum to the northwest, reaching the Low Countries in the twelfth century and the western dialects thereof in the thirteenth. The coastal dialects preserve *ft* until the end of the Middle Ages and in some relic forms even today.

In Early Middle Dutch, *ft* is characteristic for Holland and Utrecht, but some attestations are also found in Zealand and Brabant (e.g. in *nichte* ‘niece’), see Mooijaart 1992: 178–83. Maps 8 and 9 compare the data for the preterite and participle of *kopen* ‘to buy’<sup>69</sup> with the noun *gifte*, *gichte* ‘gift’.<sup>70</sup> The latter noun clearly shows the western retention of *ft*, whereas the former displays *xt* also in Flanders and Zealand. The discrepancy between the two maps may be explained by the analogical restoration of *f* in *gifte* on the model of *v* in *geven*. Similarly, *ft* > *xt* is much more restricted in the conjunction *ofte* ‘or, whether’ (see Berteloot 1984a, Map 136), where *f* could be restored on the model of the conjunction *of*. Analogical restoration of *f* can also explain *schrift* ‘writing’, for which *xt* is only once attested in Limburgian *scregt*. The data for *after*, *achter* ‘behind’ from the thirteenth century are rather restricted (Berteloot 1984, Map 133, has *ft* only in a few places in Holland and Utrecht), but CRM14 shows consistently *after* in all of Holland and Utrecht, in a considerable portion of the North Brabant evidence, and sporadically in West Limburg. Van Loey (1976: 101) mentions the sporadic preservation of *ft* throughout Brabant into the fifteenth century.

<sup>69</sup>. In red the spelling (*ge)*coft-* is indicated (total 57), in yellow the spelling (*ge)*cocht-* (total 365).**

<sup>70</sup>. In red the spellings with *ft* are indicated (total 1235), in yellow, the ones with *cht*, *ht* or *gt* (total 105).

## 10.2 Final *-g* > *-f* in Flemish

The change of final (devoiced) *-x* to *-f* is attested in various contemporary Dutch dialects. Examples given by Schönfeld & van Loey (1970: 100) include West Flemish *genoef* ‘enough’, *ploef* ‘plough’, and Groningen *sloef* (beside *sloeg* ‘quiet, down’, Fri. *slúch* ‘sleepy’). All of these have a rounded back vowel, which may partly explain the shift to labiality of the following fricative. Schönfeld & van Loey call the change an Ingvaemonic phenomenon since it can also be found, for instance, in English *enough* and *laugh*, both with [f]. Taeldeman (1982: 282) regards the phenomenon as attested in Modern Flemish dialects as one of the possible Ingvaemonic characteristics of Flemish. Van Bree (1997a: 15) adds Frisian *genôch* ‘enough’ versus *noflik* (Du. *genoeglijk* ‘pleasant’).

The converse change of *-f* to *-ch* is found in Early MDu. *viscoigh* ‘fishmonger’, *viscoighhighe* ‘female fishmonger’ in Calais (1293), and in other surnames from the same town, such as *Apelcoich* (1291), *Honecoigh* (1293), *Honecoech* (1296), *Houtkoich* (1298) (Gysseling 1966c: 157). The etymology of *-coich* is thought to be *\*-kōf* ‘seller, salesman’ (comparable to OHG *koufo*), but this is not without its difficulties: there is no attestation of putative *\*koof*, its *f* (instead of *p*) would be unexplained in Dutch, and the formation itself is not known outside Calais.

As to the phonetic background of *-x* > *-f*, note that the acoustic impression caused by *f* and *x* is similar. The change could therefore be explained as perception-driven. In Middle Dutch, syllable-final *x* > *f* is also attested in other contexts, albeit sporadically (van Loey 1976: 100, note 1). An example from the thirteenth century is *sorfechtech* (WBrab., 1291–1300) for *\*sorg-echtig* ‘careful’; the simplex *sorge* ‘care’ retains its velar fricative in the same text. For modern dialects, Weijnen (1966: 245) mentions some other instances of this change. In fact, *f* > *x* and *x* > *f* can be observed in many languages, particularly in syllable-final position. These changes are linguistically too trivial to project them back into the time of Frisian-Franconian language contact.

## 10.3 *h*- > zero, *g* > *h*, and hypercorrections

In Modern Dutch, the loss of prevocalic *h* is a feature of the dialects of Flanders, Zealand, western Brabant, and some of the more archaic dialects of Holland (Scheveningen, Egmond aan Zee, Enkhuizen, Volendam, Marken).<sup>71</sup> Procope of *h*- is furthermore found in parts of Overijssel, Groningen and Belgian Limburg; see

<sup>71</sup> Weijnen 1976: 248 plus map, Weijnen 1991: 124f. + Map 52, Scholtmeijer 1997, De Wulf 2003, De Wulf in *FAND IV*: 431–432.

FAND IV, maps 214 to 216. According to De Wulf (2003), zero anlaut used to be characteristic for several other towns of Holland, such as Schiedam, Vlaardingen, Gouda, Monnickendam, etc., and for Groningen, where *h-* has been reintroduced under the influence of the standard language. Crena de Jongh (1959: 77f.) has argued that *h-* had a weak position in the colloquial language of Holland in the seventeenth century. There is no reliable written proof, however, for the absence of *h-* in the earlier language of Holland.

It seems likely that most of the Limburgian *h*-less dialects have dropped *h-* under the influence of urban dialects from Brabant (Goossens 1992b). In Brabant, the loss and the hypercorrect addition of *h-* is found in some western dialects from the thirteenth century on, though van Loey (1976: 108) argues that the early cases may be due to the influence of the Flemish writing tradition.

It is possible, then, that *h*-lessness in Late Middle Dutch was restricted to Flanders, Zealand, and Holland, whereas *h-* was preserved in Brabant, Limburg, Gelderland and Utrecht.<sup>72</sup> And although *h*-loss is found in many languages independently – and would be a trivial development of any phonological system – the geographic distribution in Dutch justifies the question whether the western *h*-loss is due to the Frisian-Franconian language contact.

Already in Old Dutch, hypercorrect instances of *h-* point to the loss of etymological *h-*. In the famous *probatio pennae*, be it of Old Flemish or Old Kentish character (cf. § 3.1.b), the words *hic* ‘T’ and *hagunnan* ‘begun’ show this feature. For the Old Flemish names, Tavernier-Vereecken (1968: 592) claims that etymological *h* is usually written. In a minority of cases, she says, *h-* was omitted or hypercorrectly added, the non-etymological spellings increasing as time proceeded. In a rather forced attempt at an explanation, she ascribes (p. 594) this state of affairs to a hypothetical social stratification in Flemish society: *h-* would have been on its way out in the lower classes whereas the higher register would strive to retain *h-*. That would, in her view, also explain why the hypercorrect cases of additional *h-* outnumber the forms in which original *h-* is not written. Some of the clearest examples of *h*-loss in Old Flemish are, in the eleventh century, *Ariuuitengem* ‘Erwetegem’ < \**Hariwitingahaim* (Debrabandere et al. 2010: 79), in the twelfth century, *achtinghe* ‘confiscation’ (< \**xaftingō-*), *ambine* ‘ham-bones’ (ACC.PL.), *oflant* ‘court-land’ (Du. *hof* ‘court’), *de ofstado* ‘court-stead’, *Erleghem* ‘Herlegem’, and in the thirteenth century, *Eribers* ‘Heribertus’, *Erricsvort* ‘Herriksvoort’, *Aie* ‘Haio’, and *alburne* ‘half a bunder’ (Ghent 1227–32).

Initial *g-* is sometimes spelled as *h-* in Flemish of the twelfth and thirteenth century (Tavernier-Vereecken 1968: 586), as in *Heldolf* for *Geldolf*, and *Hosin*, *Hosekin* for

<sup>72</sup>. Of course, some of the modern, eastern *h*-less dialects, e.g. those of Limburgian Maasland and of Overijssel, may have arisen independently.

*Gosin, Gosekin.* Note also the place-name \**Gansbeke* > *Hansbeke* (1160) > *Ansbeke* (1236), in which *g*- > *h*- occurred early enough to share the change of *h* > zero. Flemish also occasionally shows the reverse phenomenon, viz. initial *g* for original *h*: *Genderdik* ‘Hendrik’, *Gobarnus* ‘Hobarnus’. Tavernier-Vereecken interprets these spellings as an indication for the pronunciation of initial *g*- in Flemish as a laryngeal fricative, which could then disappear together with etymological \**h*-.

The Old Dutch toponyms from the northern Low Countries seldom show *h*-loss or hypercorrect *h*-.

Additional *h*- appears in some of the oldest Latin sources from the eighth and ninth centuries, e.g. *Hisla* ‘the river IJssel’ (814 copy 1170), *Hemi* ‘the river Eem’ (777 copy 10th, end 11th c.), *Heclunde* ‘Egmond’ (922 copy early 13th c.). It would have to be investigated whether this may be due to Romance scribes of the documents in which these names are found. For most of modern Belgium, the same is basically true: both *h*-loss and hypercorrect *h*- are rare. The number of such cases is slightly higher than in the north, probably because we are nearing the francophone area, and the number of toponyms occurring in (Latin or) Old French sources is therefore higher.

In West and East Flanders the loss of *h*- is significantly more frequent. Examples include *Hatinghem* (9th c.) > *Atinghem* (995) ‘Aaigem’ (EFla.), *Haleftra* (974) > *Haltra* ‘Aalter’ (EFla.), *Herlebouds kapelle* > *Erlebaldi k.* (WFla.), *Handelingahem* (10th c.) > *Andelgem* (WFla.), *Hardeoia* > *Ardoorie* (WFla.), *Hasnetha* > *Assenede* (EFla.), *Hiclesbeke* (962) > *Ycelsbeka* (1126), *Ikelesbeka* (1191–1200) ‘Ekelsbeke’ (Nord, France). Hypercorrect *h*- is also found more often in Flanders than in other regions. To a certain extent, this preponderance will be due to the simple fact that the number of toponyms from Flanders by far outweighs that of other regions. But it may also be due to the strong influence of the French writing tradition, and to francophone scribes. Such cases, therefore, do not allow reliable statements on the actual occurrence of hypercorrect *h*- in Old Flemish.

In order to get more reliable data on the geographic situation, we will have to take a look at Early Middle Dutch (van Loey 1976: 108f., Mooijaart 1992: 196f.). As far as we can see in VMNW, *h*-loss occurs in West-Flanders and, more sporadically, in Ghent and Brabant, but not elsewhere. Compare the attestations of words such as *haghe* ‘fence’, *halen* ‘to get’, *hebben* ‘to have’, etc.; see also Berteloot 1984a, Map 134 and p. 95–6. Early Middle Dutch thus seems to confirm that Flanders was the original locus of the loss of *h*.

There is another issue at stake here. The isogloss concerning the change *h* > zero is continued on the French side of the language border in the same direction. This was first noted by Grootaers (1942: 221 including map II; see also Weijnen 1964: 12–3). The explanation for this phenomenon is still unclear. Weijnen 1964 discusses a number of other phonological and lexical isoglosses which seem to

transgress the Dutch-French language border, such as the fronting of /u:/ to /y:/ and the diphthongization of /ɛ/ to /jɛ/. Weijnen argues that mere Romance-Germanic bilingualism cannot account for the shared isoglosses on both sides of the linguistic border, and he concludes that an earlier, common substratum language may have been responsible for the shared developments. Just which substratum this would have been, Weijnen does not say. Von Wartburg (1971: 86) and van Bree (1996: 270) apparently disagree with Weijnen's conclusion. They ascribe the shared isoglosses to intense language contact between Dutch and French. In the words of von Wartburg, "Il y a ici une rare communauté de tendances d'évolution, qui montre l'intensité de la symbiose des deux races".<sup>73</sup> De Schutter (1999: 126) is somewhat more specific, and traces shared features of southern Dutch and Wallonian French back to the broad language contact zone between Romance and Germanic dialects in the early centuries of the Germanicization of the Low Countries.

Let us have a closer look at Weijnen's *h*-argument. Latin *h* had become silent in all of Gallo-Romance, but a new *h* was introduced with Germanic loanwords from the fifth century (as in *haie* 'hedge', *héron* 'heron', *haïr* 'to hate'; Bourciez 1971: 125). This *h*- was preserved in central-northern France until the end of the Middle Ages, but was then lost. In Normandy and Lorraine, however, *h*- was retained. As Map 10 shows, the Lorraine part extends into the eastern part of Wallony. The disappearance of 'Germanic' *h*- from most dialects in the later Middle Ages probably happened under the influence of Central French, as was the case with many changes in French.<sup>74</sup> Its spread, from Isle de France to Artesia and Picardia, would imply that the zero/*h* isogloss originally had a very different course, and probably did not even reach the French/Dutch linguistic border before the Modern Era.

On the Dutch side of the border, the modern course of the isogloss is also not ancient. The earliest attestations of *h*-loss and hypercorrect *h*- appear in Flanders in the tenth century. Zero anlaut was originally confined to Flanders before it spread to Brabant in the thirteenth century, to the cities of Antwerp and Brussels, among others. The map shows that the southern part of the *h*-less area (from Brussels eastward) stretches much further to the east than the northern part (from Antwerp

73. "This is a rare case of common tendencies of change, which shows the intensity of the symbiosis of both races". Of course, the equation of 'language' with 'race' is scientifically untenable (or, rather, meaningless).

74. This scenario is supported by the occurrence of a very similar development with Frankish /w/. In his treatment of the West-Frankish loans in Gallo-Romance, Gamillscheg (1970: 393) has shown that Frankish /w/ was borrowed as /w/ in northern France (the actual area of settlement of the Franks) whereas it was replaced by /gw/ in areas further south, where the contact was less intense. In the later period (say, the second half of the Middle Ages), *w*- was replaced in many words and names by *gw*-.

eastward). As Goossens 1992b has argued, this must be due to recent expansion of *h*-loss from Brussels into smaller provincial towns in southern Brabant and Limburg. It follows that the continued *h*/zero isogloss north and south of the linguistic border, as seen on Map 10, is the result of two chronologically and linguistically independent changes: one from Flanders eastward, another from Central France northward. Its twentieth-century course was certainly very recent, and so may be the fact that the Dutch and French isoglosses meet at all.

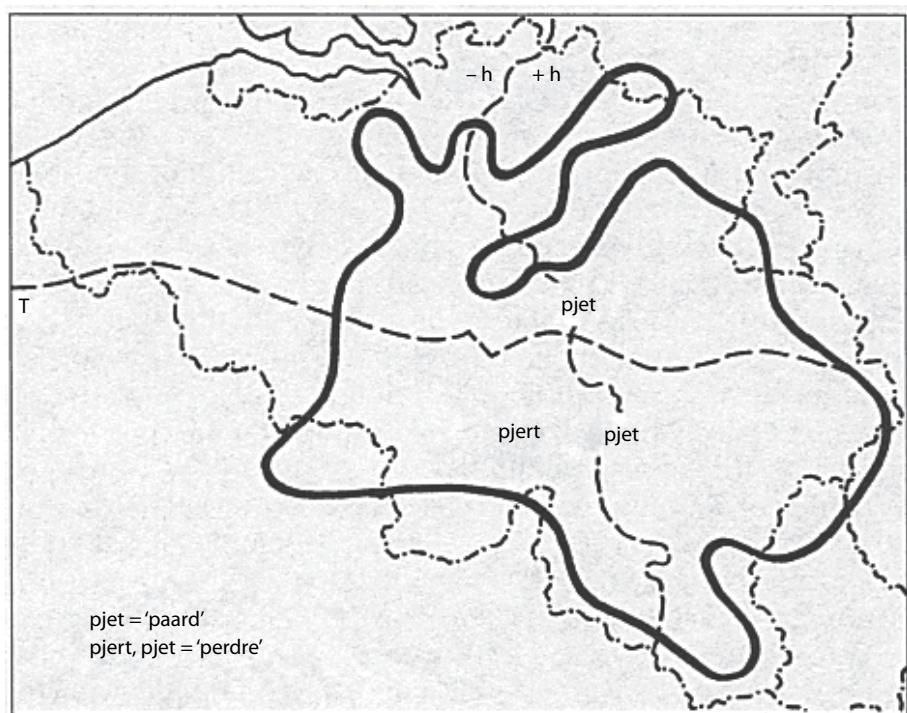
We thus return to the western Dutch origin of *h*-loss. A tentative scenario can be written, according to which *h*-loss would be due to language contact between Franconian and Proto-Frisian. Suppose Proto-Frisian did not yet have the /*h*/ of Franconian, but had kept the velar fricative /*x*/ of Anglo-Frisian. There is some circumstantial evidence to this effect. In the clusters *hl-*, *hn-*, *hr-*, *hw-*, the *h*- disappeared in southern Dutch already in the eighth century, according to van Loon 2014: 117, whereas *hl-* and *hr-* were retained in northern and eastern Dutch until at least the tenth century, judging by the spelling of toponyms. Since the spellings *hl-*, *hr-* etc. presuppose an audible consonant, which in this position cannot be [h], they actually point to phonetic [xl-], [xr-]. In Old Frisian, *h*- was still preserved in writing before resonants until the fifteenth century (Nijdam 1999). Suppose, also, that Old Low Franconian had already changed initial \**x*- into *h*- by the eighth century, around the time when Flanders shifted to speaking Franconian. The native speakers of L1-Proto-Frisian may not have identified Franconian \**h*- with their own velar *x*-, since [h] is quite an unstable sound. Instead, *h*- was lost from Flemish.

To illustrate how this language contact may have worked, I reconstruct in Table 28 the relevant phonological systems as far as the voiced velars and fricatives are concerned, at a stage after the Proto-Frisian palatalization of velars next to front vowels, and after the loss of intervocalic \**x* > \**h* > zero in both varieties.

Table 28. A language contact scenario for Flemish *h*-loss

L1 Proto-Frisian:							
g-	-g-	-gg-	-g > -k				
x-		-xx-	-x				
L2 Early Old Low Franconian:				New L1 Old Flemish:			
y-	-y-	-gg-	-y > -x	x-	-x-	-gg-	-x
h-/x-		-xx-	-x	zero		-xx-	-x

This whole scenario is of course highly speculative, and merely intended to illustrate the theoretical possibility of language contact playing a role in *h*-loss. In particular, the discrepancy between *h*-loss in Flanders and (apparent) *h*-retention in thirteenth-century Holland is striking.



Map 10. Diphthongization of /e/ in Dutch and French; Proce of *h* in Flemish and Wallonian. Taken from: van Bree 1996: 270.

#### 10.4 Metathesis of *Vr* to *rV* before *xt*

In the second member of personal names, the sequence *Vrxt* is metathesized to *rVxt* in Old Saxon, Old High German and Old English. The restriction of this shared metathesis to personal names is generally ascribed to the prosodic status of the second member, which presumably carried less stress than the first member (cf. Gallée 1993: 154, Braune & Reiffenstein 2004 § 120, Campbell 1959: 185). In Old English, metathesis in stressed position is mainly found in Late Northumbrian and Late West Saxon (Campbell 1959: 184), always beside unmetathesized forms.

In Old Frisian, *thruch* ‘through’ (MoWF *troch*, MoEFri. *truck*, InsNFri. *troch* < WGm. \**purx*) and *Briocht* (\**berhta-*, in which metathesis preceded breaking) point to a Proto-Frisian date of the metathesis (Bremmer 2009: 40). Thus, the metathesis in Frisian was much earlier than in Dutch, to which we turn now.

In Old Dutch, the metathesis is absent from most of the available evidence, which includes the place-names corresponding with modern *Bracht*, *Brecht*, and

*Merchtem*, the Wachtendonck Psalter glosse *filoberht* ‘praeclarus’, the words *nunt-forhte* ‘do not be afraid’, *uorhten* ‘awe’, *thurg* ‘through’ in the Middle Franconian Rhyming Bible, and *thurgh* in the Leiden Willeram. Only a few place-names containing personal names in \**Berxta-* show *r*-metathesis in the twelfth century, viz. *UUoubrechtengem* (1122) < \**Wald-berxt-*, *Engilbrehtes ambehte* (NHol., 776 copy 1183–95), and *Osprehtashem* (Holland, 889 copy 1206–26), *Osbragttashem* (918–948 copy end of 11th c.). Of the many personal names in \*-*berxta-* in the Old Ghent sources mentioned in Tavernier-Vereecken 1968, nearly all are attested with a second member *-bertus*. Metathesized instances are *Albrecht de Campin* (12th c.), *Albrecht Scipboem*, *Albrech Scipboem* (1201–50), *Woitin filius Gedebreds* (1201–50), *Giselbrech* (1200), *La[m]bret Scipboem*, *Lambrect* (1201–50), *Voubrech* (1201–50), *Willebret* (1034–58 copy 12th c.). Thus, the Old Dutch situation is – as far as the sources allow us to tell – similar to that of Old Saxon and Old High German.

In Early Middle Dutch, the metathesis has extended to stressed syllables in most dialects, as shown by its presence in *vrucht* ‘fear’, *vruchten* ‘to fear’ < \**furxti*, *wracht(te)* ‘made’ < \**warxt-* (to *werken* ‘work’), and *scipwrictere* ‘shipwright’ (Calais, 1289). Original *Vr* is only preserved in the Limburgian Servatius Legend (ca. 1200), which has *uortgen* /vorxtən/ ‘to fear’ and *uerwargte* /vərwarxtə/ ‘made angry’. Original or secondary \**Vrxt* has been preserved in the place-names *borchte* (Antw.), *merchtene* (Mechelen, from \**Marktin-*), and *werchtere* (\**werf-ter-*; Debrabandere et al. 2010: 274).

There is evidence that the development \*-*ft* > -*xt*, which can be dated to the twelfth century, preceded the metathesis of \*-*Vrxt* to -*rVxt*. Early MDu. *noetdorff* (WBrab., 1266–67, 1291–1300), MoDu. *nooddruft* ‘poverty, need’ continues PGm. \**naudi-purb-ti-*, compare OS *nodthurft*, OFri. *nēdthreft*, Got. *naudipaurfts*. In the thirteenth century, *rch(t)* is attested indirectly in East Flemish *noetdorch* (1289, with -*cht* > -*ch*), and in Limburgian *notdorten* (1290–1310; plural, with *rcht* > *rt*). These forms still have no metathesis, but the form *nootdruchte* from Zwolle (1399–1425) shows \*-*rft* > -*rcht* plus *r*-metathesis. It follows from these early attestations that -*ft*- as found in Early MDu. *noetdorff* and MoDu. *nooddruft* must be due to restoration of *f* on the model of the verb *dorven* ‘to need’. In the fifteenth and sixteenth centuries, *r*-metathesis of *Vrft* to *rVft* is reflected in tokens from Holland and north-eastern Dutch (e.g. *noetdruft* regularly in Drente and Groningen). In the southern dialects, *r(f)t* predominates until at least 1500.<sup>75</sup> In literary Modern Dutch, the metathesized variant has become usual in all texts after 1600.

75. There are exceptions with metathesis in the south, such as *noitdroftich* ‘oportunus’ in *Teuthonista* (1477) from the Cleves/Gelders area.

If MoDu. *gewricht* ‘joint’, which is first attested in 1599, goes back to \*ge-werf-te,<sup>76</sup> it supports the relative chronology of \*ft > xt and r-metathesis as based on *nooddruft*. Yet it is uncertain whether *gewricht* indeed belongs to *werven* ‘to turn’: its ch may have been influenced by MDu. *wrijgen* ‘to turn, grow crooked’.

As to the cause of the leftward metathesis of *r* before *cht*, we can only speculate. Van Loon (2014: 222) ascribes it to the rise of a prop vowel after *r* (\**furxt* > \**furuxt*), as attested in Old Saxon and Old High German: OHG *forahta* < *forhta* (Braune & Reiffenstein 2004 § 69), OS *thurufti* < \**thurfhti* (Gallée 1993: 110), etc. Subsequently, the vowel to the left of *r* would have been weakened and the new distribution of consonants (*fr* – *xt*) would be more balanced.

Geographically and chronologically, there is no compelling reason to assume that the metathesis belongs to the coastal Dutch phenomena. One could speculate that the cluster *rcht* is more difficult to pronounce without a prop vowel if the fricative had a uvular or pharyngeal quality (as it does in the modern coastal dialects) than if it was a palatal fricative (as in southern and southeastern Dutch). This distribution would match, though only very roughly, the preservation of -*rcht-* in the Limburgian dialect, which has generalized the palatal fricative.

## 10.5 xs > ss

The assimilation of *xs* to *ss* is typical of Dutch and Low German, as against the retention of the cluster as /ks/ in Frisian, in Standard English and in High German: Dutch *vos, was*, Middle Low German *vos, was*, versus MoWF *foks, waaks*, E. *fox, wax* (but Yorkshire *owse* ‘ox’), MoHG *Fuchs, Wachs*. In the Wachtendonck Psalter, we find assimilation in *uusso* ‘foxes’ (GEN.PL.) beside retained *xs* in *wahsan* ‘to grow’, *wihsel* ‘change’, *ohsson* ‘oxen’. The assimilation seems to have taken place earlier in western dialects than in eastern ones, because in Ghent no trace is left of \**x* before *s* by the eleventh century (Tavernier-Vereecken 1968: 589). By 1200, *ss* has become general in Dutch. In Old Saxon, *hs* mostly remains in the Heliand though there are some spellings with single *s*. In the Freckenhorst *Heberegister*, the older parts preserve *hs*, but *s* becomes normal in the younger parts: *Thahsbeki, Thasbiki* ‘Badger’s Creek’, *ses* ‘six’, etc. Single *s* also surfaces in the Prudentius glosses and in other Old Saxon sources, cf. Gallée 1993: 178.

The early rise of /ss/ also in Old Saxon and the Dutch distribution by 1200 leave little room to argue for a coastal Dutch origin of the change. On the contrary, Frisian has retained the velar obstruent in the cluster as /k/.

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76. To *werven* ‘to turn’, compare *wervel* ‘vertebra’ and MDu. *ghewerve* ‘pivot’.

## 10.6 Medial *pp* > *ss* and *tt*

Most of the relevant handbooks state that the West Germanic geminate \**pp* yields *ss* in Dutch (van der Meer 1927: 105, Schönfeld & van Loey 1970: 57f., van Bree 1987: 157, van Loon 2014: 79). At the same time, they claim that some words also show *tt*. The latter reflex is sometimes regarded as a feature of the Frisian substrate in coastal Dutch, most recently so by Bremmer (2008: 293). Yet since *tt* sometimes occurs in dialects which are far removed from possible Frisian substrate influence, not all words with *tt* can come from a Frisian source. In fact, as I show in detail in de Vaan 2014a, WGm. \**pp* regularly yielded *s(s)* in all dialects of Dutch whereas *t(t)* continues WGm. \**tt*. Here is a short summary of the main evidence.

Two nouns in \**pp* have the reflex *ss* in all dialects, viz. *wisse* ‘stere’ (< \**wibjōn-*) and *klosse* ‘lump, bobbin’ (< \**klubbōn-*). Next to *klosse* we also find *klotte*, which probably reflects a variant West Germanic preform \**kluttōn-*. The words *latte* ‘lath’, *motte* ‘moth’ (see Kroonen 2011: 214–21), and *spot* ‘mockery’ must also be reconstructed with original \*-*tt-*, which existed side by side with preforms in \*-*pp-*. They have no *ss*-variants in Dutch.

In three other words, the variants in *tt* can be explained as resulting from analogical influence of related forms. The noun *smisse* ‘smithy’ (< \**smiþjō-*) is sporadically found as *smitte*, which may have introduced the final *t* of *smit*, *smet* ‘smith’. Dutch *klisse* ‘tangle’ (< \**klippōn-*) has a variant *klitte* in western and southeastern dialects; its *tt* may stem from cognate forms such as Du. *klijt* ‘clay’ < \**klit-*, G. *Kließe* ‘burdock’ < \**klit-*. The verb *bessen* ‘to dab a wound’ (< \**babjan*) is only found in central West Flanders, whereas *betten* of the standard language is at home in the other coastal Dutch dialects. I regard *bessen* as the original reflex, whereas *tt* in *betten* might have been influenced by *bat*, *bet* ‘better’.

The main exception in Dutch is *zwet(te)* ‘border (ditch)’, which is a genuine loanword from Frisian. WGm. \**swaþjō(n)-* (f.) ‘border, demarcation’ was derived from \**swapa-* ‘swath; track’. We find it in Frisian and in Dutch dialects bordering on Frisian. Old East Frisian *swe(th)the*, -*swiththe* retains the dental fricative which became *tt* in OWFri. *swette*, *switte* (f.) ‘border’, MoWF *swette*, *swotte*. In Old Dutch, we find the toponym *Wimnorasuetha*, ‘border of the inhabitants of Wimmenum’ (ca. 1125–50) in North Holland. Middle Dutch *swette*, *zwette* ‘border, demarcation’, MoDu. *zwet* is attested in Groningen and in Holland. In Holland, it is mainly used for a water course, for instance in the compound *zwetsloot*, ‘border-ditch’. For a collection of Hollandish toponyms involving *Zwet* (found from Delft northward), see Blok 1959a: 21. The geographic restriction to Holland and Groningen and the identical meaning and usage of the words guarantees that Dutch *swette*, *zwet* is a loanword from Frisian.

A similar case is presented by Hollandish *til(le)* ‘wooden bridge; attic’ (Schönenfeld & van Loey 1970: 58, Bremmer 2012: 133), for which compare MoWF *telle* ‘threshing floor’, OWFri. *tille*. Initial *t*- represents the Frisian development of WGm. \**p*-, as opposed to Dutch *d*- . The same etymon WGm. \**piljōn*- which has given Frisian *telle* is the source of MDu. *dele*, MoDu. *deel* ‘floor, threshing floor’ (German *Diele*). *Tille, til* occurs as ‘(small wooden) bridge’ from the sixteenth century onwards in North Holland, Fryslân and Groningen (see WNT s.v. *til<sup>I</sup>*). As ‘attic (in a barn)’, *til(le)* is attested in Holland around 1400 (MNW s.v. *til<sup>I</sup>*, 1390–1400; the text is a report of the war against the Frisians, so this might be a frisianism) and still in the twentieth century (see TNZN Map 7.5). In Fryslân, this meaning is found for *til(l)-ing*. It represents a semantic specialization of the ‘wooden planks’, as in German *Diele*. In the seventeenth century, *til* in Holland developed the meaning ‘falling bridge to catch doves or pigeons’ whence ‘pigeon cage’. The borrowing presupposes the change of *p*- to *t*- in Old West Frisian, a process which Laker (2014) dates roughly between 1300 and 1450. Hence, *tille* may have been borrowed in North Holland as an important infrastructural term in the landscape of West Friesland. The fourteenth century seems rather late for the borrowing, but the word might have still had *th*- in Frisian but was borrowed with *t*- by Hollandish, which, already in the second half of the thirteenth century, had no *th*- anymore.

The development of \**pb* is confirmed by the evidence of intervocalic \**pm*, which mainly shows the reflexes *-dem(-)* and *-s(se)m-* in Dutch. The former was the regular reflex when *m* was vocalized to *-Vm*, whereas *sm* regularly resulted from a Late Old Dutch cluster \**pm*. Inner-paradigmatic alternations between \*-*pVm* and \*-*pm*- are reflected in the geographic variation between *d* and *ss* in *adem* beside *asem* ‘breath’ (\**æpma-*) and *vadem* ‘fathom’ (\**fapma-*) beside *vessem* ‘to fathom a needle’ (\**fapmjan-*). Three different reflexes co-occur in *peem*, *pessem*, and *pettem* ‘root, field horsetail’, all from \**pibma(n)-*. Whereas *peem* < \**pedem* and *pessem* show the same reflexes of \**pm* as *adem* beside *asem*, the form *pettem* in Belgian Limburg and near Brussels (Goossens 2004) is the result of contamination with \**pitt-* ‘pith’ (Dutch *pit*).

The assibilations in \**pb* and \**pm* can be dated to the early twelfth century, the first witness being the place-name *Kneslara, Klisnara* (1129) from \**klibbōn-*. A possible structural reason for the Dutch development may have been systemic pressure. Old Dutch initial *p*- was voiced to [ð-] in the tenth and eleventh century and merged with *d*- early in the twelfth (Tavernier-Vereecken 1968: 580f. based on the personal names from Gent). Geminate \**pb* did not share the voicing of single \**p* but remained voiceless until the further change to *s* took place in the early twelfth century. This date coincides with [ð-] > *d*- and can be explained as resulting from the (loss of) coherence in the consonant system. As long as \**ð* existed, \**p* could be paired with it in the phonological system; but when \**ð* had become *d*, voiceless \**p*

was the only dental fricative remaining, found in only a limited number of lexemes. For Old Dutch \**þm* we must similarly assume that the fricative remained voiceless and was then reinterpreted as /s/. This explanation in terms of voicedness also helps to understand the different outcome *tt* in Frisian, where initial single *th-* remained unvoiced and became *t-* (except for function words). On the development of dental fricatives in all varieties of Frisian, see Laker 2014.

## 10.7 Summary

**Table 29.** Summary of the consonant phenomena reviewed in Chapter 10

Change	Coastal vs. inland Dutch	Status in coastal Dutch
<i>f</i> > <i>xt</i>	partly	internal development
<i>-g</i> > <i>-f</i>	no	internal development
<i>h</i> -loss	yes	imposition from PFri.?
<i>Vrxt</i> > <i>rVxt</i>	no	internal development
<i>xs</i> > <i>ss</i>	no	internal development
<i>þþ</i> > <i>ss</i> and <i>tt</i>	no	internal development

## Fronting of stressed *a* to *e*

The fronting of WGm. \**a* to /æ/ is an Anglo-Frisian characteristic, see § 8.2.4. It affected stressed \**a*, unless:<sup>77</sup>

- \**a* was followed by \**x*,
- \**a* was followed by one of the clusters *lC*, *rC*, or *xC*,
- \**a* stood in open syllable followed by a back vowel in the next syllable,
- \**a* stood between *w* and *rC*,
- \**a* stood in the unaccented variant of a stressable word (e.g. *was* ‘was’).

Also, /a/ may in some cases have been restored due to paradigm pressure, e.g. 3SG. \**fariþ* << \**færíþ*. In Proto-Frisian, \**æ* merged with \**e* before 700 CE.<sup>78</sup> This implies that there were a number of cognate forms in which Proto-Frisian had \**e* but Proto-Franconian \**a*, for instance, \**dej* vs. \**dag* ‘day’, \**ek(k)er* vs. \**ak(k)er* ‘field’. Several authors have therefore interpreted western Dutch forms with written <*e*> or phonological /ɛ/, which correspond with eastern Dutch <*a*> and /a/, as traces of an Ingvaeanic stage of coastal Dutch with /æ/ or /ɛ/ just like Frisian (Weijnen 1972, Taeldeman 1982: 279). We will first look at the modern dialects, and then turn to three sets of forms in which \**a* has became *e* at an earlier stage: before *st* and *sp*, by analogy with other words containing *e*, and in two Flemish names.

### 11.1 Phonetics of short /a/ and /e/ in modern dialects

Some modern dialects have a fronted reflex of \**a* across the board, or in a phonetically conditioned subset of forms with inherited \**a*. Weijnen (1966: 144) interprets sporadic occurrences of *e* for /a/ as coastal relic forms. Actually, most of his examples are found in the western Betuwe, which does not belong to coastal Dutch. In

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77. See Bremmer 2009: 29 for this enumeration of conditions. Hoekstra (pers.com.) doubts whether accentuation caused the retention of /a/ in *was* ‘was’ instead of preceding *w-*, in view of OFri. *weter* beside *water* ‘water’ and other forms in *wa-*.

78. This \**æ* is not to be confused with the product *i*-mutation of \**a* (i.e. \**ä*), and of other sequences, which yielded a different PFri. vowel \**æ*; see Hofmann 1970, Kümmel 2014, Hoekstra & Tigchelaar 2014.

the introduction to the reflexes of short \**a* in Dutch, the editors of *FAND* I (p. 2) write that a fronted variety of short *a* occurs:

1. In a fairly large part of northeastern Dutch;
2. Sporadically in North Holland;
3. Often in South Holland, Utrecht, western North Brabant and (south)western Gelderland;
4. Often in the province of Antwerp;
5. Sporadically in western South Brabant and southeastern Flanders;
6. In a small southwestern part of French Flanders.

Most frequently, *FAND* (p. 12) observes fronting of /a/ before a velar in the noun *dak* ‘roof’, viz. short [æ] or [ɛ] in West Flanders, Zealand, Holland, Utrecht, and South Brabant. Whereas the Ingvaeanic origin of this front vowel in western dialects, as per Weijnen (1955: 19), is considered possible, *FAND* argues that the *e*-vocalism in South Brabant may be due to the influence of *i*-mutated forms (for instance, in *tek* ‘branch’ after the diminutive *tekske*, in *dek* ‘roof’ after *dekske* or the verb *dekken*) or to the reinforcement of the palatal quality of the vowel before velar obstruents.

Seven to eight centuries have elapsed since the thirteenth century, which makes it hazardous to use modern, whole-scale distinctions as evidence for the phonetics of /a/ at the time of the Frisian-Franconian language contact. Also, the distribution of the fronted variants does not exactly match the putative spread of Proto-Frisian. For instance, short /a/ in the North Holland dialect of Volendam has two allophones, according to Van Ginneken (1954: 283), viz. [a] before labial and dental consonants but [æ]<sup>79</sup> before velars, -st-, -sp-, -r(C), and in diminutives with the suffix -i. This is clearly a recent, phonetically determined distribution. In nearby Monnikendam, the sound [æ] has been generalized for all instances of short /a/.

An exception may have to be made for North Holland in general. When Boekenoogen (1897: xvi) tells us that *e* (probably [æ]) instead of *a* is found in the Zaanstreek in a number of high-frequency words such as *hed(de)* ‘had’, *wes* ‘was’, *wet* ‘what’, *wen* ‘when’, *went* ‘because’ (Du. *want*), *den* ‘than’, one may note that Old Frisian also has *e* in some of the corresponding words, such as *h(w)et* beside *h(w)at* ‘what’, (*h)went* beside (*h)want* ‘because’, *thenne* beside *thanne* ‘than’, and it is possible that these words (which are often used in unstressed position) preserve an older, general palatal pronunciation of /a/. But it is also conceivable that, as unstressed words, they developed somewhat differently from the main lexicon, as is

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79. Van Ginneken writes “a”, but calls it a more or less palatalized vowel.

often the case. To give just one parallel: in modern Limburgian, *dat* ‘that’ and *als* ‘if, when’ have become *det* and *es*, but they are the only words with /a/ to have done so. Dupont (1910–11: 155) suggests that they underwent *i*-mutation in sandhi contexts, e.g. *dat-ich* ‘that I’ > *det-ich*. This is an ingenious but not necessarily correct solution.

Boekenoogen also mentions other North Hollandish forms, such as *ekker* ‘acre’, which is found with *e* in texts of the seventeenth century. This may be a real loan-word from Frisian, as is the case with several North Hollandish words for local toponymy. The Zaanstreek adjective *leff* for MoDu. *laf* ‘weak, cowardly’ (Boekenoogen 2004: 294) refers particularly to (plat-)fish of inferior quality. The word *dem* ‘hoarse’ seems to be a relic form for *damp* ‘moist, weak’. The neuter noun *stet*, plural *stetten* for ‘landing place, jetty’ is given by Boekenoogen (2004: 503) for the restricted area of Akersloot and Uitgeest. The word is already attested in the sixteenth century as *stedt* and seems to have been more widely spread, occurring also in the town of Hoorn. The word is not mentioned by Pannekeet (1984). It is tempting to regard *ste(d)t* as a loan from Old Frisian *sted*, *stēd* ‘place’, surviving in specialized usage. In any case, the meaning of *stet* differs enough from synchronic *stad* ‘town’ to exclude that *stet* is merely due to a general, western Dutch raising of *a* to *e*.

I conclude that only North Holland shows what may be traces of an earlier, general raised reflex of short \**a*. In view of the certainty of a Frisian substrate in this province, this is also the least surprising area to find the *e*-reflexes.

## 11.2 *a* > *e* before *sk* and *sp*

In Middle and Modern Dutch, a few nouns have raised *a* to *e* before *sk* and *sp*, as was noted, for instance, by van Loey (1976: 11) and WNT s.v. *esch*.

Raising before *sk* is found in MoDu. *tas* ‘bag’, *fles* ‘bottle’ and *es* ‘ash-tree’. MDu. *tassche* ‘bag’ (MoWF *task*, MoHG *Tasche*) shows a variant *tesche* across all dialects and in different genres of literary and non-literary texts (MNW). The *e*-forms were also regularly used in northern and southern Dutch in the seventeenth century, after which they became restricted to southern Dutch (thus WNT). In modern dialects, *tesch(e)* features in southern and northeastern dialects of Dutch.

The word for ‘bottle’ (MoHG *Flasche*, E *flask*) is *flassche* in a few Flemish sources listed by MNW, whereas *flessche* is found in Brabant, Limburg (Tongeren 1396, CRM14), Holland, Utrecht, the eastern city of Deventer, and in the Cleves/Guelders area (*Teuthonista*, 1477). In Modern Dutch, after the last *flasch* was sighted in the sixteenth century, only *e*-forms survive.

The ash tree is found as *ask-* in Old Dutch toponyms and *asch* in 1240 in Limburg. West Flemish has *essche*, also in the surname *van der essche*, at the end

of the thirteenth century. Later in Middle Dutch (Hol. *eske*) and Modern Dutch (see *PLAND*,<sup>80</sup> *es(k)*) is the only form left, including in Limburgian. The toponym *Esselijkerwoude* in South Holland (from \**aska-leka-weri-wald* ‘wood of the inhabitants of *Aska-leka* = Ash-stream’) has *a-* in all Old Dutch attestations, such as *Asclekerwalt* (1001–50) and *Aslecarwald* (1156). Initial *e-* appears in *Eslikerwoude* (West Holland, 1280–87), and early modern *Esselickerwoude*. Similarly, the town of Assendelft in North Holland is spelled *Ascmannedelf* and *Ascmannedilf* (1063 copy 12th c.); the first member contains \**askman-* ‘sailor’ or ‘pirate’ (OE *æscman*). After 1100, the first syllable usually has *e-*: *Eskmadelf*, *Eskendelf*, etc. (Künzel, Blok & Verhoeff 1989). Quak cautions that the twelfth-century attestations with *E-* are all from documents originating from the abbey of Egmond, and may display the local, Frisian reflex *e-* from short \**a-*.<sup>81</sup>

The raising in ‘ash’ is attributed by Franck & van Wijk (1912) and *EWN* to *i*-mutation in the adjective \**askīna-* > *esschijn* ‘ash-wood’ (Limb. 1240 *eschen*, EBrab. 1260–70 *esscin*, EFla. 1260–80 *esscen*), and the same explanation is given by Seibold (2011: 258) for MoHG *Esche* as against MHG *asch* (next to *esch*). Yet this analogical explanation of *e* is not available for *tesche* ‘bag’ and *flesche* ‘bottle’. Together, these three words can be explained if *a > e* was due to *sk*. If this is correct, we are dealing with a sporadic tendency rather than a completed sound change, since other words in \*-*ask-* lack the raising, for instance, MDu. *assche* ‘ashes’ (modern *as*), *lassche* ‘connection’ (modern *las*), *masche* ‘mash’ (modern *maas*), *pasch* ‘meadow’ (modern *pas*), *rasch* ‘quick, rash’ (modern *ras*), and *wasschen* ‘to grow’ (modern *wassen*). The regional distribution of *e* does not allow for a connection with the difference between coastal and inland Dutch.

There are four nouns in which WGm. \*-asp- is certainly or possibly reflected as Dutch *esp*,<sup>82</sup> viz. *esp* ‘asp’, *gesp* ‘clasp’, *hesp* ‘ham’ and *wesp* ‘wasp’.

1. *esp* ‘asp’. In Old Dutch toponyms without *i*-mutation factor, we find both *e-* and *a-*: *Espouth* (< \**aspā-holt*) in West Flanders (4x in the 12th c.), *Espot* (EFla., 1195), (*H*)*asplar* (< \**aspā-lār*) in East Flanders (12th c.), *Aspanmora* in Frisia (890 copy ca. 900). The field name *Espot* in East Flanders (1272) is explained as \**aspōpu-* by Gysseling 1960a, again without *i*-mutation factor. Middle Dutch glossaries yield *espe* (*Glos.Haarl.*, 1440–50) and *espenboem* ‘asp tree’ (*Teuthonista*, 1477). In Modern Dutch, the tree is only sporadically attested before the twentieth century, and always with *e-*. Most dialects have replaced it with a heteronym, such as *ratelpopulier* ‘trembling poplar’ or *ratelaar* (see

80. <http://gtb.inl.nl/iWNTLINKS/DATADIR/paginazy.html?PLAND+Gewone%20es>.

81. In a talk given in Leiden on 12 April 2014.

82. The frequent metathesis of *sp* to *ps* will not be taken into consideration.

*PLAND*). Middle Low German also has *espe*(-), contrast OHG *aspa*, MHG *aspe*, MoHG *Aspe* > *Espe*.<sup>83</sup>

2. *gesp* ‘clasp’. Cognate forms are MoWF *gasp*, MLG *gespe*, *gaspe* ‘clasp’, *gespe*, *geipse* ‘space between two hands clasped together’, ME *gaispen*, *gaspen* ‘to gape, gasp’, MoE *to gasp*, OIc. *geispa* ‘to yawn’. Franck & van Wijk (1912), followed by EWN, reconstruct two Proto-Germanic ablaut variants for the noun, viz. \**gapsō(n)*- next to \**gipsō(n)*-. They could have arisen due to contamination of the roots \**gap-* and \**gi-* ‘to yawn’. By this interpretation, Dutch *gesp(e)* could be a direct reflex of \**gipsō(n)*-. Unfortunately, ‘clasp’ is never actually attested as *gisp(e)*, and an inherited sequence \*-*isp-* is normally retained in most Dutch dialects, compare MoDu. *gispen* ‘to flog; to rebuke’, *kwispelen* ‘to wag the tail’, *mispel* ‘medlar’. Hence, the alternative explanation of *gesp(e)* from \**gaspe* gains in likelihood. This etymology is supported by the occasional occurrence of *a*-tokens beside the majority of *e*-forms: Early MDu. pl. *gespen* (EHol., 1276–1300), Late MDu. *gasp* ‘hook’ (Hol., 14th c.), ‘clasp’ (Hol., Deventer), *gesp* (Hol.), *ghispe* (Fla. 1350, Hol.). Modern Dutch literary texts always have the noun *gesp* and the verb *gespen* ‘to clasp’, but in dialects, *gasp* survives in North Holland (Boekenoogen 2004: 141). Since *i*-forms are absent from all West Germanic cognates except for a few Middle Dutch instances of *gispe* beside *gespe*, and since -*isp-* does not normally yield Du. -*esp-*, *gispe* can safely be explained from the raising of short *e* to *i* which is occasionally found in many Dutch words. *Gasp* being the normal form in English and Frisian, we must conclude that West Germanic had a noun \**gaspō(n)*- which was raised to *gespe* in Dutch.
3. *hesp* ‘ham’ < WGm. \**xaspjō*<sup>84</sup> (ON *hespa*) and *hasp* ‘bobbin’ < \**haspō*- . The original meaning of \**xasp-* may have been ‘joint, hinge’, as shown by the cognate forms MHG and MLG *haspe*, *hespe* ‘hinge; bobbin, clew’, MoHG *Hespe* ‘id’, OE *hæspe* ‘hinge, clamp’, ON *hespa* ‘hinge; ball of wool’. From the first attestation of the noun in Dutch (Ghent, 1276–1300) until today, *hesp(e)* means ‘ham’, also ‘hip joint’, in Flanders and Brabant. A variant form is *hisp* (Ypres, 1614). In northern Dutch, *hips* and *hieps* ‘pork from the upper leg’ are found particularly in the province of Utrecht and western parts of Guelders, and in some eastern dialects of North Holland and South Holland (van Veen 1968). The *a*-form first appears in the verb *onder haspen* ‘to mix during coiling’ (Bruges, 1301–25). *Haspe* is attested as ‘bolt’ in medieval northeastern Dutch, and Kiliaan gives *hasp*, *haps* ‘ball of wool, yarn taken from the reel’. Modern West Flemish still has *hasp* m. ‘winding reel’. Kiliaan also gives *haspe*, *haspel*, ‘spindle, winding

83. “Der Umlaut im Neuhochdeutschen ist offenbar nördlicher Herkunft, er könnte vom Materialadjektiv *espen* herrühren” (Seibold 2011: 259).

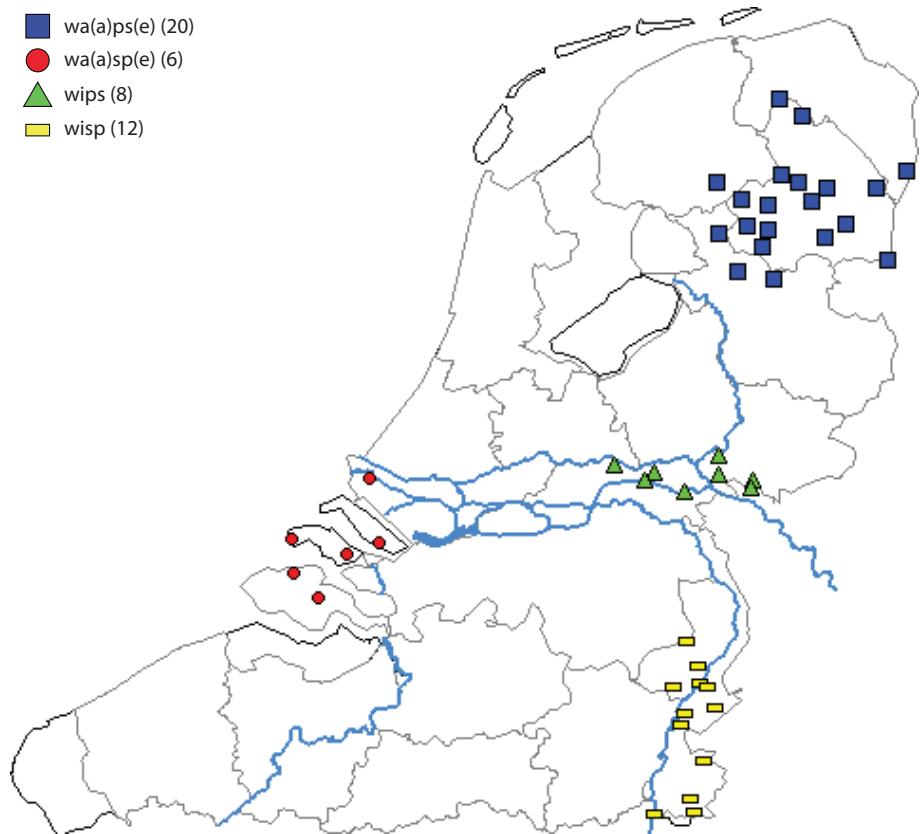
84. Not \**haspa-* as given by EWN.

reel'. The derived verb *haspen* 'to wind yarn around the bobbin' is found in Flanders and Brabant (MNW). The diminutive *haspel* (MoWF *hispel*, *hespel*, *haspel*, verb *hespelje*, OHG *haspil*, MLG MHG *haspel*) 'bobbin', also 'hinge', and its derived verb *haspelen*, have *a* in all of Middle and Modern Dutch, with only one exception in WNT (*hespel*, van Beverwijck, 1643).

There are two important aspects about this word family. Firstly, there is no general raising of *asp* to *esp* as with 'clasp' or 'wasp'. Secondly, we have a strict separation between *e*-forms meaning 'ham' and *a*-forms meaning 'hinge, bobbin'. Since the cognate forms in other Germanic languages require the existence of both PGm. \**xaspō-* and \**xaspjō-*, it seems best to explain Dutch *haspe* from the *ō*-stem and *hesp* from the *jō*-stem. It is possible that these were semantically specialized already in the protolanguage, \**xaspō-* meaning 'hinge' and \**xaspjō-* 'joint, hip'.

4. *wesp* 'wasp' < \**wabsō-* (OS *waspa*, MoLG *weps*, OHG *wafsa*, *wefsa*, MoHG *Wespe*, Bavarian *wapsn*, MoWF *waps*, also *wapse*, *weps*, *weeps*, OE *wæps*, *wæfs*). There is no evidence for a Proto-Germanic preform \**wabes-* which could have caused *i*-mutation. The Reichenauer glosses from northern France (ca. 750, copy end 8th c.) have *uuapces*, /wapses/, for 'wasps' or 'hornets'. Middle Dutch *wespe* (Limburg, 1240) means 'gadfly'. In Middle and Modern Dutch, *wesp(e)* is the usual form of the noun, but several other variants exist, notably *wisp(e)* or *wips(e)* and *wa(a)ps(e)*. WNT attributes the variant with *e*-vocalism to raising of *a* before *sp*, an environment that could also have caused the further raising to *i* in some dialects, cf. Franck 1910: 66. If *uuapces* has any real link with Dutch, it would follow that the raising to *e* took place somewhere between the ninth and the thirteenth century.

Map 11 for modern Dutch was made using the GTRP database. It neglects all forms of 'wasp' containing a mid or mid low front vowel, either rounded or unrounded (*weps*, *weeps*, *waeps*, *wups*, etc.). Instead, the map focuses on the *a*- and *i*-vocalism and the ways in which they may confirm the scenario sketched above. The map shows four groups of deviant forms. The blue squares in and around Drente show the forms *wapse*, *waspe*, *waaps(e)*, *waaspe*: these may preserve the original *a*-vowel, and, partly, its shortness. Another group of *a*-dialects is found in northern Zealand and the adjacent islands of South Holland: *wasp(e)*, *waasp(e)*, *waaps*, indicated with red circles. Both *a*-areas are known for other retentions of phonological features which changed in central Dutch (e.g., they resisted *e*-apocope and retain \**ī* and \**ū* as monophthongs). The green triangles in the central and eastern Betuwe give the form *wips*, whereas the yellow quadrants in Limburg have *wisp*. In both areas, this vocalism is due to recent raising of /ɛ/ before *sC*-clusters.



Map 11. Variants of *wesp* in Dutch dialects

In conclusion, we have established that *hesp* probably contained an *i*-mutation factor. The nouns *esp*, *gesp* and *wesp* have raising of original *a* conditioned by the following *sp*. As far as we can tell – the best data are from ‘wasp’ – this raising took place at least in the coastal dialects (with some exceptions, notably Zealand), Brabant, and Limburg, ultimately in the thirteenth century. It therefore has no connection with Frisian-Franconian language contact.

### 11.3 Dutch *e* for *a* by analogy and/or *i*-mutation

In some other forms, the unexpected *e* instead of *a* can be ascribed to analogy. Van Loey (1976: 11, note 2) lists a number of instances, which we must relate to their models.

The noun *ghetel* occurs once for *ghetal* ‘number’ (in a ms. from 1340), and can easily be due to the influence of *tellen* ‘to count’ and its derivatives. The occasional form *achterstel* (e.g., in *van den achterstellen renten* in Holland, *van achterstellen beden* in Zealand)<sup>85</sup> for the adjective *achterstal* ‘past due’ will be due to the model of the noun *achterstelle* ‘arrear’, which continues an earlier *ja*-stem.

Dutch *blad* ‘leaf’ is found with *a* in all of Early Middle Dutch. Later in Middle Dutch, there is one instance of the dative plural *bledden* ‘the flat part of an oar’, and, according to MNW, modern dialects have *bled* ‘table-top’. MoDu. *bled(de)* occurs with specialized meanings, especially for denoting certain parts of instruments, e.g. *bledde* ‘blade of a chisel’ (Gullegem, West Flanders, WVD II.6a: 200). The specialized meaning and the final *-e* of Flemish *bledde* may point to a derivative of *blad*, such as an original *jō*-stem. For *blad* ‘leaf of a tree’, WVD does not give a single instance of *e* in Flemish.

MDu. *scende* ‘shame, dreadful state’ can be deleted from the list: it is not a by-form of modern *schande* ‘shame’ but a separate lexeme. This is asserted by MNW, which adduces semantic differences between MDu. *scande* and *scende*. Whereas *schande* has developed as a derivative *\*skamdō-* from the root of *schamen* ‘to shame’, *schende* must hail from the verb *schenden* (*\*skandjan-*). In Modern Dutch, *schende* has disappeared.

Flemish *step* and *dek* for modern *stap* ‘step’ and *dak* ‘cover, roof’ were mentioned as Ingvaenisms by Taeldeman (1982: 279); van Loey also mentions MDu. *dek* and *tek*. Yet MNW, under the lemma *dec* ‘roof’, equates *dek* with German *Decke* ‘cover, ceiling’, which is the better solution. Dutch inherited from West Germanic two nouns, *\*paka-* n. ‘roof’ (G. *Dach*, Du. *dak*) and *\*pakja-* ‘cover’ (G. *Decke*, MDu. *dec*). The latter may have been reinterpreted as a derivative of the verb *dekken* ‘to cover, thatch’, which would explain its neuter gender and the lack of final *-e* in Middle Dutch and modern Flemish. In Early Modern Dutch, the neuter *deck* can still refer to either ‘cover’ or ‘roof’ or ‘ship’s deck’; in the modern standard language, *dek* usually means a ‘ship’s deck’ whereas *dak* means ‘roof’.

The noun *stap* ‘step’ has a variant *step*, *steppe* in Flemish according to Kiliaan (1599), which is confirmed by modern dictionaries. As another variant of *stap* and the verb *stappen*, Kiliaan also mentions *stip* and *stippen*. These remind us of the occasional raising of *e* to *i*, and they may therefore confirm earlier *\*step* and/or a verb *\*stappjan-*. There are other traces of *e*, e.g. in MDu. *voetstopen* (DAT.PL.) ‘foot-steps’. The probable history of the word is carefully explained in EWN. For West Germanic, there is evidence for three different stems, viz. a noun *\*stappa(n)-* (Du. *stap*, MLG *stappe*, OHG *stapfo*, *stapf*), an *a*-stem *\*stapa-* (OFri. *stap*) and an *i*-stem *\*stapi-* (OFri. *stepe* ‘step’, OE *stæpe*, *stepe*; OHG DAT.PL. *stepfen*). All of these can be derived from a single original paradigm with nominative singular *\*stapō*, genitive

<sup>85</sup> See MNW.

\**stappaz*, which then split to yield *a*-stems, *n*-stems, and *i*-stems, some with intervocalic \**p* and others with intervocalic \**pp*. Dutch inherited both \**stap(p)a-* and \**stapi-*. The *i*-stem is reflected in the *i*-mutation in *voetsteken*, in Flemish *step(pe)* and in *stip* (compare the suffix -*skep/-skip* ‘-ship’ from \*-*skapi*). A verb form 3SG. PRES. *stept* ‘steps’ is adduced by van Loey 1976: 84 as a form of *stappen*: *ende stept over die greppe* ‘and if he steps over the gutter’ (i.e., to enter someone’s house; in *Rechtsbronnen van Aardenburg* 210, 58).<sup>86</sup> Quite clearly, this form is an early instance of MoWFle. *steppen*, and continues a *jan*-verb.

MDu. *tac* ‘sharp point, tooth’ m., MoDu. *tak* ‘branch of a tree’ (MoWF *tak*, *takkel*) is found occasionally as *tek*, e.g. *den middelsten teck wt den rieck* ‘the middle tooth of a hay fork’ (Sprang, NBrab., 1530–43). Cognates are MHG *zacke*, MLG *tack(e)*, ME *tacke*, MoE *tack*. Whereas English and German point to an *n*-stem \**takkan-*, MDu. *tac* represents an *a*-stem \**takka-*. For details on the etymology, see Kroonen 2011: 317–19. There is no indication that it was an *i*-stem, and the attestation from Sprang adduced by MNW is from an area in North Brabant where *i*-mutation (in the plural) cannot be excluded.

Dutch *vak* ‘compartment, section’ continues PGm. \**faka-* n. ‘enclosure; section’. Cognate forms are OS *fac*, OHG *fah*, OFri. *fek*, OE *fæc*; compare also in Middle Dutch and in modern dialects *veken* n. ‘fence, barrier’ < \**fakima-*. A local variant is Zealandish *vek* ‘part of a barn in which the grain was stored’ (WZD 1037), PL. *vekken* and *veken*. In de Bo (1892) and WVD, *vek* ‘section’ is not attested, though it is striking that, for ‘storage space’, WVD gives the word (*schuur*)*vlek* in northwestern West Flanders, between two adjacent area’s with *vak* (Veurne-Ambacht and northern Waasland). Hence, it seems conceivable that *vlek* ‘spot’ replaced earlier \**vek* once the latter was replaced by the more standard form *vak*. Zealandish *vekke* f. ‘surface, piece (of arable land)’ probaby also belongs here, and the word may be found in the toponym *Veckeput* ‘Vecke-pit’ in East Flanders (1276–1300; VMNW). This would suggest a reconstruction as a f. noun \**fakjō-*.

According to van Loey (1976: 11), the Middle Dutch adjectives *gram* ‘angry’ (PGm. \**grama-*), *nat* ‘wet’ (\**nata-*) and *tam* ‘tame’ (\**tama-*) had variants *grem*, *net*, *tem*, which might be due to the influence of inflectional variants or cognate forms. Of *grem* I only found one instance in *Die Rose* by Heinric van Aken, rhyming with *hem* ‘him’ (alternatively, *grem* could represent the adjective *grim*, which is otherwise not found in Middle Dutch), beside hundreds of instances of *gram*. I found no instance of *net* ‘wet’ in the major dictionaries, but Plantin (1573) has *genet* ‘wetted’, participle of *netten*, as a synonym of *nat*. An *e* is found more often in ‘tame’, where *tem* (less frequently than *tam*) appears in Jacob van Maerlant’s *Der Naturen Bloeme* (WFla., 1287: *dat si den otter tem maken* ‘that they make the otter tame’) and *Leven*

86. Full text on [www.rzuser.uni-heidelberg.de/~cd2/drw/F8/aardbrbr/g210-211.htm](http://www.rzuser.uni-heidelberg.de/~cd2/drw/F8/aardbrbr/g210-211.htm).

*van Sint Franciscus* (1301–50). The Hollandish poet Willem van Hildegaersberch has *tem* rhyming with *clem*. Karel van Mander uses *tem* (1597), as does Hondius (1621). *Tem* survives in southern dialects for cultivated plants, e.g. as *temme* or *teme kastanje* ‘sweet chestnut’ in Flemish (see *PLAND*).

The correctness of van Loey’s analogical explanation of *e* clearly emerges from a comparison with the extant cognate verbs: all three adjectives stand beside well-attested causative verbs in *e*. Next to *gram* we find MDu. *gremmen* ‘to make angry’, cognate with Got. *gramjan*, OHG *gremmen*, MLG *gremmen*, OE *greman*, *gremian*. The causative of *nat* is found in Got. *natjan*, OHG *netten*, MDu. and Early MoDu. *netten* ‘to wet’. Finally, MoDu. *temmen* is still the causative of *tam*, compare Goth. *gatamjan*, OHG *zemmen*, OE *temman*.

The standard Dutch suffix *-schap* ‘-ship’ reflects PGm. f. \**skapi-* ‘shape’. It is found as *-schip* or *-schep* in medieval coastal Dutch and in modern dialects from Flanders to North Holland. The nouns occur as neuters and as feminines. Marynissen (1995: 250–4, 270–7) provides the overview given in Table 30 for the form of the neuter stems in southern Dutch in the thirteenth century:

Table 30. Neuter *-schap* in southern Early Modern Dutch

	West Flanders	East Flanders, Brabant
NOM.SG.	<i>-scep/scip, -scheep</i>	<i>-scap</i>
GEN.SG.	<i>-sceps</i>	<i>-scaps, -scaepts</i>
DAT.SG.	<i>-scepe</i>	<i>-scape; Utr. -scaept</i>
ACC.SG.	<i>-scep/scip, -scheep</i>	<i>-scap</i>

For the feminine abstracts in \**skapi-*, Marynissen’s tabular summary is reproduced in Table 31, which shows the same distribution: a front vowel throughout in the west, and a low vowel throughout in Brabant (and Utrecht). Holland holds an intermediate position:

Table 31. Feminine *-schap* in Early Middle Dutch

	Flanders	Holland	Brabant, Utrecht
NOM.SG.	<i>-scepe, -sceep</i>	—	<i>-scap</i>
DAT.SG.	<i>-scepe(n)</i>	<i>-scap / -scep(e)</i>	<i>-scap(e)</i>
ACC.SG.	<i>-scepe</i>	<i>-scap / -scep(e)</i>	<i>-scap</i>

Marynissen concludes that western Dutch treated f. \**skapi-* as a light stem, retaining the suffix \**-i* in Old Dutch and yielding *i*-mutation of \**a*. In the east, the word was treated as a heavy stem, and \**-i* was lost without causing *i*-mutation. This situation is similar to *stede* vs. *stad* ‘town’ from WGm. \**stadi-*.

She gives two possible solutions for the front vowel of coastal Dutch. It could be due to phonetic raising *a* > *e* of the type *step*, *bled* (but see above for doubts about this phenomenon). Alternatively, it could be due to generalization of the *i*-mutated vowel \*ā which arose in the oblique case forms in the Old Dutch paradigm: NOM. ACC. \**skap*, GEN. \**skepis*, DAT. \**skepi*. Inland Dutch would have generalized the unmutated variant. This solution seems preferable, as it allows us to compare the reflexes of \**skapi-* directly with those of \**stadi-* and those of \**stapi-*.

The *i*-vocalism occurs very rarely in the feminines of the thirteenth century, viz. only in *binnen der baliuscip van zuet hollant* ‘within the bailiffship of South Holland’ (Dordrecht, 1293), and *onser vrouwen daghe ter boedscippe* ‘the Annunciation of Our Lady’ (Bruges, 1278). The other, sporadic instances are in the neuter: *sghe-selscips* (Bruges, 1291), *siin ghezelcip* (Hulst, 1297), *enich herscip* ‘army’ (Bruges, 1299), *tvinderscip* ‘the mediation’ (Bruges, 1280). Probably, *i* is due to raising of *e* before *p*, possibly with the additional factor of reduced stress. Lengthening of *i* is found in the unique form *in orcontsciip* ‘in attestation’ in Hulst (1297).

Thus, it is confirmed that none of these words is due to an unconditioned raising of *a* to *e* in coastal Dutch. The nouns *ghetel*, *achterstel*, *scende*, *dek* and the adjectives *grem*, *net*, *tem* must be due to the analogical introduction of *e* from cognate words, whereas *bled(de)*, *steppen*, *tek* and *vek(ke)* have regular *e* from *i*-mutation of \**a*. In *step*, *stip* ‘step’ and *-schep*, *-schip* ‘-ship’, the front vowel was introduced from oblique case forms where it arose regularly from *i*-mutation of \**stapi-*, \**skapi-*.

#### 11.4 Flemish *Feger-* and *Gent*

The adjective PGm. \**fagra-* ‘beautiful’ (OHG *fagar*, MHG adv. *vagere* ‘lovely’, OS *fagar*, MoE *fair*) occurs with *e* in the Old Ghent names *Fegernodus* (Ghent, 948 copy 11th c. copy 12th c.), *Vegericus* (Ghent, 11th c.), *Vegericus* (Ghent, 1098), MDu. *Veieric* (1306–07), and the modern family name *Feyerick* (in Ghent). As a simplex, the adjective does not occur in Dutch. Hence, Mansion (1924: 116) interprets *e* as well as intervocalic *j* as ingvaeonisms. This could be true for *j*, which is an unusual reflex of intervocalic *g* in Dutch. For *e* in *Feger-*, by extension, one might then assume the same explanation.

The city of *Gent* ‘Ghent’ is usually spelled with *a* in the Old Dutch period: *Ganda* and *Ganth* in the ninth century (but *Gend*, *Gent* in a ninth-century Anglo-Saxon Chronicle), *Gand*, *Gant* in the eleventh and twelfth centuries. A variant of the name is *Gandao*, latinized to *Gandauum*, which the Life of Saint Bavo (819–840 copy 12th c.) seems to regard as the actual toponym: *in loco qui dicitur Gandauum castrum cuius nunc caenobium aperte uocatur Ganda* ‘in a place called the *Gandauum* castrum, the monastery of which is clearly called *Ganda*’. Furthermore, we find *in uico/*

*castro/portu Gandauo* in the ninth and tenth century, and so on until the twelfth century, beside *Gant*. There is no written evidence for an original umlautfactor. The final *-a* in *Ganda*, which is first found in a document from 819 (*monasterium quod antiquitus uocatus est Ganda*), must be the locative singular ending (Gysseling 1944). Are we dealing with a case of the Late Old Flemish lowering of unstressed vowels to <-a>, as in the Rochester Poem and elsewhere (van Loon 2014: 178 points, among other forms, to *Bugginsela* for \*-sali in 964), so that *Ganda* may have been a locative \**Gande*? The earliest attestations seem too early for this explanation.

The first appearance of the vowel *e* in local sources is *Gend* in 1127. The reality of the front vowel is confirmed by the raising to *i* in *Chintbruge* ‘Gentbrugge’ (1165), *Ghint* (Velzeke, 1249), which matches other cases of raising of *enC* to *inC* in Flemish. In the thirteenth century, most Flemish and Hollandish documents spell the name as *Ghent*, but there are sporadic spellings as <ae>, which probably reflects /a:/: *gaent* (Ghent, 1210, in a Latin document; Bruges, 1269, in a Dutch document; see VMNW), *ghaent* (Calais 1298, 2x in French documents), *gaent*, *ghaent* (Guemps near Calais, end of 13th c.), see Gysseling 1966c: 148.

Weijnen (1958: 17) notes the problematic appearance of *e* and compares *Genderen* (NBrab.) for earlier *Ganderon* (11th c.), and, with *i*-mutation, *Gendringen* (Gld.) < \**Gandringon*, *Gendt* (Gld.) < *in Gannite* (790–93 copy 1170–75). Besse (1997: 374–6) posits \**Gand-ja-*, which she interprets as the Germanic adaptation of earlier, possibly Celtic, \**Gand-avo-*. Yet in that case, one would expect <*e*> to show up much earlier than the twelfth century. Also, for a *ja*-stem, the lack of a second syllable in both the Romance and the Dutch forms of the name (MDu. *Gent*, not \**Gende*) would be conspicuous: compare MDu. *ende* ‘and’ < \**andja-*, *ellende* ‘foreign country, exile’ < \**alja-landja-*. Gysseling (1966c: 148) ascribes the lengthened vowel in Calais *ghaent* to a preform \**ganut*, which would have alternated with \**ganit* whence *ghent*. Yet in view of ODu. *Gand*, *Ganda*, such forms are hardly likely.

## 11.5 Northwestern Dutch *sel* ‘shall’

The 1SG. and 3SG. present MDu. *sal*, MoDu. *sal*, appears as MDu. *sel*, dial. MoDu. *zel* particularly in North and South Holland and in Utrecht. It has been claimed that it reflects an Ingvaeanic fronting of short \**a*. This explanation is not certain because the inclusion of the whole province of Utrecht means that its spread would be wider than usual for coastal Dutch forms. Also, *sal* > *sel* could be due to pretonic weakening of the auxiliary verb. More details of the variation in the paradigm of *zullen* and its present SG. *zel* vs. *zal* are discussed in § 15.2.1, nr. 22.

## 11.6 Summary and interpretation

Of the dialectal reflexes of /a/ as [æ] or [ɛ] in modern western dialects, we cannot be sure that they are old. An exception may be made for some North Hollandish words which are attested with *e*, sometimes already in the seventeenth century: in theory, some of these words may be direct borrowings from Old Frisian, but it cannot be excluded that they continue an earlier, (more) general raised reflex of \**a*, either in the local Old Frisian substrate or in an earlier phase of coastal Dutch. The auxiliary *sel* 'shall' might belong here too but remains uncertain. Our analyses have furthermore shown that the raising of *a* to *e* before *sk*, *sp* was a non-coastal development of Dutch dialects, and that the *e* found in a number of nouns and adjectives is either due to analogy (e.g., in *ghetel*, *dek*, *grem*), to regular *i*-mutation (*bled(de)*, *steppen*), or to a combination of both (the *e* in *step*, *-schep*). Only the Old Flemish name element *Veger-*, *Feier-* and the place name *Gent* show an apparently unconditioned raising of \**a* to *e*, which might be due a coastal Dutch adoption of an earlier phoneme short /a/. Yet on their own, these two forms do not allow any generalizations, except for the fact that in both words \**a* is flanked by *g*, and we know that the sequence \*-agC- was prone to palatalization.



## Rounding of *a* to *o*

Van Loey (1976: 11–2) gives a number of Middle Dutch forms with *o* for usual *a*, and notes that, in general, *o* is a western feature and *a* eastern. Traces of this western rounding can still be found in modern dialects. Van Loey's collection contains a number of different environments which must be discussed separately. For each of these features, there is a clear link with Anglo-Frisian and Low German developments, in the sense that *a* was backed to *o* in the same environments in Old Frisian, Old English, and, to some extent, in Old Saxon.

### 12.1 Before a retained nasal

Nasalization which led to centralization and/or rounding of stressed low vowels took place in the Anglo-Frisian period, as shown by the variation between *a* and *o* in Old English and Old Frisian words such as *lang/long*, *man/mon* (Campbell 1959: 51–2, Bremmer 2009: 24–7), and by the reflex *ō* if the nasal consonant dissolved before a voiceless fricative, as in OFri. *tōth* ‘tooth’ (\**tanþ-*), *ōther* ‘other’ (\**anþara-*). Backing of \**a* before nasals is also known from Old Saxon glosses, toponyms and personal names, such as *biuongenę* (Prudentius glosses, Paris ms.) to *vangen* ‘to catch’, *Langon* beside *Longon* (*Werdener Heberollen*),<sup>87</sup> but the phenomenon is unknown in Middle Low German (Sarauw 1921: 90, 301).

There is little evidence for this development in medieval Dutch outside Flemish. The place-name *Longonmor* ‘Long-moor’ on Texel (751–800, copy 9th c., copy 12th c.) is located in former Frisian-speaking territory, and the undiphthongized /o:/ in *-mor* suggests Frisian phonology (Quak 2003: 291). In Middle Dutch, the name *Bomborc* ‘Bamburg’ (WFla., 1210) may represent \**ban-burg* (Gysseling 1960a: 97). Jacobs (1911: 31) regards the change of *anC* to *onC* as specifically West Flemish. Attestations include *Langhemarc* (WFla., 1219), *Longmarc* (1220) ‘Langmark’, the personal name *heinekins longhe speis* (GEN.SG., Bruges, 1270), and, from the fourteenth century, *commen* for *cammen* ‘to comb’ (Bruges, 1322), *onveren* for *an-* ‘to start’ (Bruges, 1325), *onder* for *ander* ‘other’ (Ypres, 1348), and *ontsende* < \**hands-ende* ‘handle’ (Damme, 1382).<sup>88</sup>

87. Gallée 1993: 45–6.

88. Jacobs 1911: 31, Jacobs 1927: 269.

The form *onderhalf* for MoDu. *anderhalf* ‘one-and-a-half’ is characteristic of Middle Dutch texts from Brabant and Limburg.<sup>89</sup> Since these dialects do not normally have *o* in *ander* ‘other’, *onderhalf* probably contains the preposition *onder* ‘under, between’, see Mooijaart 1992: 82, note c. By contrast, the form *onderhalf* as found in Bruges in the thirteenth century (24 tokens, as against 46 tokens with *an-*) is likely to show rounding of *a* before *nd*.

The above evidence does not necessarily point to a Proto-Frisian substrate feature, especially in view of its recent and sporadic nature. But it does not conflict with such a hypothesis, either. The variability within Old Frisian (*long/lang*, *lond/land*; cf. Boutkan 1997 on this issue) implies that the nasalization was preserved until well into Old Frisian, where we see a preference for *on* in eastern texts versus *an* in western ones. If, around 700, speakers of Proto-Frisian imposed their own allophonic distribution of /a/ onto Proto-Franconian words, the almost complete absence of traces thereof in the later sources would not be unexpected. After all, coastal Dutch would have acquired allophonically nasalized vowels which could be denasalized at a later stage. For instance, Proto-Flemish \**lānd* would become Old Flemish *land*. An alternative solution would be to hypothesize a paradigmatic alternation in Proto-Frisian which depended on the syllable structure, e.g. NOM. ACC.SG. \**lōnd* vs. NOM.ACC.PL. \**landu*. The coastal dialects would have generalized the oral allophone [a].

## 12.2 Before a nasal which was lost

Proto-Germanic vowels were nasalized before \**mf*, \**ns*, \**nb*, and \**nx*. When the nasal consonant disappeared, it left a lengthened vowel in all of Germanic (in the case of \**nx*), in all of Dutch (with \**mf* and \**nx*), or only in Anglo-Frisian and Low German (in all four sequences). Prenasal \**a* was centralized and, often, rounded in Anglo-Frisian. If the nasal consonant disappeared, the vowel ō usually resulted. In western Dutch, there are rounded reflexes of \**a* in these contexts which have been argued to reflect the same development as in Anglo-Frisian, for example, western *zacht* ‘soft’ versus eastern *zacht* (ANKO I: 24–32, Taeldeman 1982: 279, van Loon 2014: 90–2).

### 12.2.1 WGm. \**mf*

Dutch *zacht* ‘soft’ represents a merger of WGm. \**samftija-* (ADJ.) and \**samftō* (ADV.). The adjective would have undergone *i*-mutation but the adverb did not. The form *senifte*, phonologically /*senfte*/ in the Wachtendonck Psalter, has *i*-mutation, and *e*

<sup>89</sup> See VMNW, CRM14.

is also found in some Limburgian derivatives of ‘soft’. Due to the merger with the umlautless adverb, the unfronted reflex in Dutch *zacht* may simply have been generalized from the adverb. The absence of *i*-mutation does not have to be ascribed to the umlaut-blocking influence of *cht* or to an external cause, such as language contact with Proto-Frisian in Buccini’s theory (cf. 15.1.1).

In Early Middle Dutch, the southeast (Limburg, Lower Rhine, East Brabant) has the spellings *sachte* /sa(:)xte/ and *saegte* /sa:xte/, whereas in West Brabant, *sachte* (10x) by far outnumbers *sochte* (1x). In contrast, all four East Flemish instances have *o*, whereas in West Flemish and Hollandish, *sachte* and *sochte* occur side by side (21 tokens of *a* versus 34 of *o* in West Flanders; one each in Holland). It seems safe to say that *sochte* must have been the vernacular form at least in all of Flemish. A similar distribution – with fewer tokens – of *a* and *o* is found in *sachten* ‘to soften’ and *onsachte* ‘difficult, painfully’. A Hollandish text from 1488 has *besaft* ‘softened’. From other Middle Dutch texts it transpires that Holland has *saft*, sometimes *saeft*, whereas *saechte* dominates in Brabant and *sochte* in Flanders. Map 12 shows the occurrence of *s/zocht(e)* in Dutch dialects according to the *MAND* database; see also the map in *FAND I: 19*. We find that all of Flanders and Zealand have a rounded back vowel, as well as adjacent parts of southern Brabant. A separate *o*-area with long /ɔ:/ is located in central Limburg and southeastern North Brabant, but here, every long /a:/ predating open syllable lengthening was backed to /ɔ:/. We can therefore be sure that the evolution in Limburg was from MDu. \**zāxt* with backing to \**zɔ̄xt* and then with shortening before the cluster to /zɔxt/ (*FAND I: 18*). For a possible explanation of the *o*-vocalism in ‘soft’ of Flanders as opposed to the *a*-vocalism in Holland, see further below.



Map 12. /ɔ:/ or /ɔ:/ in ‘soft’ according to the *GTRP* database

### 12.2.2 WGm. \*ns

1. Germanic *\*ansu-* ‘god’ occurs as <os-> = /o:s/ in the Old Ghent personal names *Osdey*, *Osdei* (several times between 1000 and 1200) ‘Ansdag’, *Osfridus*, *Usfridus* ‘Ansfrid’, *Osmundus* ‘Ansmund’, *Oswalo*, *Uswalus* ‘Answal(h)’, and *Ose* ‘Anse’.<sup>90</sup> Among Old Dutch place-names, the same reflex surfaces in ‘Oosmanskerke’ in Zealand (*Osmundi capellam* 1166 copy 12th c., *Ostmondskerke* 1213, *Ostmundi capella* 1150), ‘Oegstgeest’ in South Holland (*Osgest* 1201, *Osgeresgest* 9th c. copy end of 11th c., *Osgest* 1220), ‘Osprehtashem’ (*Osprehtashem* 889 copy 1206–26, *Osbragttashem* 918–48 copy end of 11th c.), ‘Osfrithhem’ (*Osfrithhem* ibidem), and ‘Oslem’ (*Oslem* ibidem), all in Holland. For places north of the Meuse, we may suspect that Os- simply represents the Old Frisian form.
2. Both PGm. *\*bansa-* (ON *báss* ‘part of a stable’, OE *bósig* ‘stall, crib’, Scots *boose* ‘stable for cow or horse’) and its competitor *\*bansti-* ‘cowshed’ (Got. *bansts* ‘shed’) have descendants in Dutch. In South Holland, in the seventeenth century and later, the form *boes* ‘cowshed’ occurs. It is a formal match of MLG *bōs*, MoLG *boos*. In Frisian, the word is preserved in OWFri. *bōsdure*, *bōser* ‘stable door’, MoWF *boasdhaar*, as well as in InsN Fri. *busem*, CN Fri. *bousem* ‘stable’ (Sjölin 2006: 23). The word *bansdeur* ‘barndoar’ in northeastern Dutch is not attested with the early development to *\*bōs-*, see Heeroma 1960: 25–7 and Map 12 ‘achterdeur’ therein.

*Banst* means ‘basket’ in the Reichenauer Glosses (ca. 750), where a Romance plural *banstas* is found, and in MDu. *banst* in Bruges (1285, 14th c.). Likely continuations of the same noun are *poest* ‘cowshed’ and *poestdeerne* ‘cow maid, milk maid’, attested in the dictionaries of Plantin (1573) and Kiliaan (1599). *Poester* is still generally used for ‘cowhand’ in southern and central West Flanders, and was also known in French Flanders, see WVD (the word *poest* itself has disappeared from the dialects). If *poest* indeed continues *\*boest* (with irregular devoicing of *b*- to *p*-), it may ultimately go back to *\*banst*, although the deviation in meaning from *banst* ‘basket’ is striking. Alternatively, the original word was *\*boes*, which developed a paragogic *-t* in Flemish (cf. Dutch *rijst-t* ‘rice’) due to hypercorrection, cf. van Loey 1976: 110–12. Since the surrounding varieties of Dutch, Low German and Frisian all have *t*-less *\*bansa-* ‘cowshed’, this second solution seems preferable.

3. The word *\*gans* ‘goose’ is usually *gans* in Dutch, but Flanders and Zealand show traces of nasal loss and vowel rounding. In Old Dutch, we have the name *Gerardus Gozh* in 1185 (without location) and the place-name *Goselant* from 1093 (copy 15th c.) near Dunkirk. The surname *Goes* is frequent in Bruges in

90. Tavernier-Vereecken 1968: 143.

the thirteenth century and occurs in *van Goeseuorde* ‘of Gooseford’. Aardenburg in 1278 has the surname *Scoudegoes* ‘Seethe-goose’. Another trace of the coastal development is the West Flemish plant *ganzemoes*, literally ‘goose mush’, for Dutch *vogelmuur* ‘common chickweed’: in the northern part of West Flanders, *goezemoes* is the only word used for this plant.<sup>91</sup>

Schönenfeld (1934) has added more evidence for *n*-loss in ‘goose’. In Groningen, we find *gooze* ‘goose’ and *geeze*, *gooze* ‘stupid woman’ (Molema 1895). Junius’ *Nomenclator* (1567), which often gives regional words from West Friesland, calls the female goose *goes*. In a manuscript from 1636 with Hollandish hunting terms, *gans* is used for ‘gander’ and *goes* for ‘female goose’. Finally, Kilian (1599) lists “Frisian, Hollandish, Saxon” *goes*, *goese* ‘goose’, besides *gheese* as an antiquated word for both ‘female goose’ and ‘whore’. *Gheese* is interpreted by Schönenfeld as an original *i*-mutated form of the coastal dialects (cf. E *geese*; *i*-mutation could stem from the dative singular or from the plural), which replaced the original nominative and accusative singular. In that case, admittedly, the absence in Holland of raising to *ie* would be striking. We do not know where the form *gheese* was actually used; it may have been a northeastern Dutch form, compare Groningen *geeze* mentioned above. Jarich Hoekstra calls to my attention Saterfrisian *Gäise* ‘goose’, which also contains the front vowel reflex. In the dialect of Zealand, *goes* may have been in currency until the sixteenth century (Heeroma 1935: 88).

### 12.2.3 WGm. \**nb*

Proto-Germanic \**smanþa/i-* ‘smooth, weak’ (MoWF *smeudich/smedich*, OS *smōthi* ‘gentle’, OE *smōþ* ‘soft, weak’, *smæþe*, *smēþe* ‘smooth’, MoE *smooth*, dial. *smeeth*) is reflected both without and with *i*-mutation in western Dutch. Without *i*-mutation, we have Flemish *smood* ‘even, smooth’ (of a surface). With *i*-mutation, French Flemish *smie*, *smieë* is an adjective indicating damp or moist earth (WVD I.1: 70). In Zealand, *smieë* is at home on Walcheren, Schouwen and Goeree, but *smoeë* on North and South Beveland, Overflakkee and also on Schouwen. With final -*g*, we find *smieïg* in western Zeeuws-Vlaanderen beside *smoeg* on South Beveland, Tholen and St. Philipsland (WZD). To sum up, *i*-mutated *ie* is largely found in western Zealand versus *oe* in the east of the province, but since *smieëg* was found on South Beveland by Knuttel in 1931 (in WNT s.v. *smieg* ‘flexible’), it appears that both forms may have coexisted earlier on. Heeroma 1968b offers an elaborate discussion of the dialectal situation in Dutch and Low German. Among his many findings is the

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91. WVD III.3, 193–95.

identification of the verbs MDu. *gesmieden* (Yperman, 1351) ‘to become soft, ripen’ and *gesmiede* ‘soft’ (Ghent, 1485) as probable old instances of the *i*-mutated reflex of \**smanbi*-.. Also, Heeroma argues that Zaans *smeu* in North Holland may be due to rounding of *e*, the earlier form being \**smede/-ig*. Heeroma summarizes his etymological conclusions on p. 282. He argues that, at the beginning of the Middle Dutch period, the coastal dialects knew both \**smiede* < \**smēde* and *smoede* < \**smōde* ‘smooth, soft’. Similarly, both variants existed in northeastern Dutch (Gron. *smui*, *smuu*, etc.) and in Westphalian. In the intermediate area, that is, in central Dutch, these words were replaced by different etyma, e.g., *smidig* and *smedig*.<sup>92</sup> Note that Flemish *smood*, in addition to showing coastal Dutch loss of the nasal and vowel rounding, would show the retention of /o:/ as against its normal raising to /u:/.

No old nasalless forms of *ander* ‘other’ or *tand* ‘tooth’ exist in Dutch. All forms of ‘tooth’ preserve the dental nasal. For *ander* we find the variants *aer*, *aar* (both /a:r/) in Holland from the fifteenth century onwards. In Modern Dutch, *aar* ‘ander’ occurs in archaic Hollandish dialects, and the standard language has the reciprocal pronouns *elkaar*, *mekaar* ‘each other’ from MDu. *elk ander* ‘each other’ and *mallik ander* ‘manly other’. Franck & van Wijk (1912) still thought that *aar* and -*aar* were regular result of \**anþar* in western Dutch. Van Haeringen (1923b: 280ff., 1927: 261) then showed that the development to *aar* fits with other Hollandish reductions of the intervocalic sequence *nd*, as for instance in seventeenth-century *keijeren* for *kinderen* ‘children’. Hence, the reduction in *elkaar* and *mekaar* is clearly the result of strong reduction in a pronominalized form, and is not due to a Frisian substrate in Holland (cf. van Haeringen 1936). In a similar vein, the surname *Hollander* has a variant *Hollaar* which is concentrated on Voorne-Putten and Goeree-Overflakkee; it is first attested in *Cornelis den Hollaer* who lived from ca. 1460 to after 1548 in Schiedam (source: *NFB* s.v. *Hollaar*). Another reduction of unstressed -*ander*- to -*aar*- is presupposed by the evolution of *van der* ‘of the’ with feminine nouns to *ver-* in surnames of the type *Van der Beke* > *Verbeke*, *Van der Brugge* > *Verbrugge*, etc. As argued by Debrabandere (2012: 128), there is sparse evidence for the intermediate stages *vaar* /va:r-/ and *var* /var-/ which eventually led to *ver-* /vər-/, such

92. In his own words: “De situatie wordt dan op een gegeven ogenblik, laten wij zeggen omstreeks 1200, deze, dat er in het vlaams-zeeuws-hollandse westen een ‘litoraal-ingweoons’ relicgebied van *smiede* < *smēde* en *smoede* < *smōde* bestaat, in het westfaalse oosten een ‘binnenlandsingweoons’ relicgebied van *smōde* en *smōde*, en dat tussen deze beide relicgebieden in het begrip dat men vroeger door het woordelement \**smōþ-* placht uit te drukken door andere vormen, bv. *smidig* en *smedig*, is opgevangen.” [“Around 1200, the situation becomes the following: in the Flemish-Zealandish-Hollandish west, there is a ‘littoral-Ingvaeanic’ relic area with *smiede* < *smēde* and *smoede* < *smōde*, in the Westphalian east an ‘inner Ingvaeanic’ relic area with *smōde* and *smōde*, and in between both of these relic areas, the concept that was formerly expressed by the word element \**smōþ-* has been taken care of by other forms, such as *smidig* and *smedig*.”]

as *Pieter van der Kindert* = *Pieter Varkindert* (1582, Kortrijk) = *Pieter Verkindert* (1592, Kortrijk), *Pieter van der Hamme* (1587, Gullegem) = *Jan van Hamme* (1582, Gullegem). The shift from *van der* to *ver-* took place in northern Campine in the fourteenth century, but not before the sixteenth century in South Brabant and Flanders.

#### 12.2.4 WGm. \*nx

1. The preterite of *brengen* (OS *brengian*) ‘to bring’ was PGm. \**branxtē*, its participle \**branxta-*. In Early Middle Dutch of Flanders and Holland, the preterite is regularly *brochte(n)*, sometimes explicitly spelled with /o:/ as *broecht*, *broichte*, and the participle is *ghebrocht*. Contrast the forms *brachte(n)* and *ghebracht* in Brabant, Limburg and East Holland (Berteloot 1984a, Map 12). The *o*-forms have remained in use in Flanders and Holland, see ANKO I: 24–32.<sup>93</sup>
2. Another piece of evidence is *denken* ‘to think’ (< \**pankjan-*) with its preterite \**panxtē* and participle \**pa/unxta-*. In the thirteenth century, the preterite *dachte(n)* is found as *dochte(n)* in Flanders and West Brabant. The 2sg. pret. *bedochts* appears in Holland (1276–1300). The interpretation of *da/ochte* is not as straightforward as with *bra/ochte* ‘brought’. Next to \**pankjan-*, Proto-Germanic had a cognate present \**punkjan-* whence MDu. *dunken* ‘to seem’; its preterite \**punxtē* (> OHG *dūhta*) would, with shortening before *xt*, yield MDu. *dochte* as well. This verb often enters into an impersonal construction, e.g. *mi dochte* ‘it seemed to me’, *mi ghedochte* ‘I thought of’, *mi verdochte* ‘I felt sorry’. Hence, it cannot be excluded that the preterite *dachte(n)* of *denken* was influenced by the preterite *dochte(n)* of *dunken*.

The participle is found as the adjective *bedocht* ‘thoughtful, intent’, especially in legal texts from West and East Flanders, next to *bedacht*. The abstract noun \**ga-hanxti-* ‘thought’ appears as *gethahti* in the Wachtendonck Psalter and *gedahte* in the Middle Franconian Rhyming Bible. After 1200, beside *gedachte* we find the *o*-form *gedochte* in Holland, in Flanders (beside *gedachte*), and once in West Brabant. *Achterdocht* ‘suspicion’ is only attested from the late sixteenth century onwards, e.g. in Kiliaan, who calls it Hollandish for *achterdenckinge*. All in all, the geographic distribution of the *o*-forms corresponds with what we find for ‘brought’, so that it seems safe to regard at least the nominal forms in *-docht* as direct reflexes of \**-panxt-*. The same may be true for the preterite of ‘think’, but the etymological uncertainties make this impossible to prove.

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93. On the modern dialect situation, and in particular on the modern *o*-vocalism in Brabant, see De Wulf 2008: 345–51.

3. The noun *\*xanxu-* or *\*xanxa-* ‘hook’ (OE *hōh*, MoE *hough*, ON *há* in *hámót* ‘heel’), of which Du. *hiel* < *\*xanxilō-* ‘heel’ is a derivative, is attested in coastal Dutch toponyms. The word *haai* occurs in southern Dutch (de Bo 1892: 348) for a ‘slanting piece or strip of land’. *Haaiman* is known on the island of Zealand and South Holland for ‘inferior sandy soils, used as hay-land’, and *haaimete* is used on Goeree with the same meaning. In some of the oldest attestations, we find a rounded vowel in the first element (cf. Foerste 1959): *Hoymilla* (near Dunkirk, 1067; from *\*xanxa-muldjō-*, see s.v. *-melde* in § 15.2.1, nr. 8), *Hoymunde* (south of The Hague, 1216; *\*-mundu-*), *Hoymanne*, *Hoiemen* (Zealand, 1220, 1294; *\*-mandō-* ‘basket; enclosed area’). See Foerste 1959: 146–7 for the semantics behind *Hoy-*, *haai* ‘hooked, slanted, enclosed’.
4. There is no evidence for rounding of the nasal in the rare word *acht(e)* ‘prosecution, banishment’ (OS *ōht*, OHG *āhta*, OFri. *acht(e)*, OE *ēht* < *\*anxtō-*), nor in MDu. *haen* ‘to hang’ (*\*xanxan-*) and *vaen* ‘to catch’ (*\*fanxan-*). In the latter two verbs, the sequence /an/ remained transparent in the paradigmatic variants *hang-* and *vang-* and could have been restored at any given moment.

The same transparency of /an/ cannot be claimed for two other etyma without any trace of rounding. viz. MDu. *haessen*, MoDu. *haas* ‘joint, leg’ (as in *varkenshaas* ‘knuckle of pork’) < PGm. *\*xanx-sinuwō-* (OHG *hähseña* ‘foot tendon, Achilles tendon’, MoHG *Hachse* ‘leg, thigh of animals for slaughter’, OFri. *hoxne*, *hoxene*, OE *hōhsinu*, ON *hásin*), and the adjective MDu. *tay*, MoDu. *taai* ‘tough’ < *\*tanxi-* (MLG *tā*, *teie*, OHG *zāhi*, MoHG *zäh*, OE *tōh*, MoE *tough* < *\*tanxu-*).

In the noun *hiel* ‘heel’ < *\*xanxilō-*, the vocalism speaks in favour of a Proto-Frisian loanword in coastal Dutch (see § 19.2); therefore it is not directly relevant to the development of inherited *\*anx* in Dutch.

### 12.2.5 Interpretation

There is sufficient evidence for rounding of *\*a* before nasal plus voiceless fricative in Flanders, Zealand, and Holland. In particular, we have good evidence before *\*mf* and *\*ns*. With *\*nþ* there is only the unclear form *smood* (and its *i*-mutated variant *smied*), and, with *\*nx*, the toponym *Hoy-*, *haai-* and the preterites and derivatives of *brennen* and *denken*, *dunken*. Within the context of the Frisian-Franconian language contact, the presence of the rounded variants in coastal Dutch cannot be explained if we assume that *\*an* had already yielded denasalized *\*ō* in Anglo-Frisian, as there would have been no L1-model to impose nasalization on L2. The explanation proposed by van Haeringen (1923b: 287) seems still the most attractive one: when Franconian was adopted by speakers of Proto-Frisian, both varieties had a nasalized vowel, the difference being that it was a rounded vowel in Frisian but

not in Franconian (where \**ā* merged with \**ā* from PGm. \**ǣ*). Vowel rounding was then imposed onto \**ā* in the coastal dialects by the L1-speakers of Proto-Frisian: in their speech, it was an automatic phonetic feature of nasalized vowels before voiceless fricatives.

This order of developments does not explain why we find Hollandish *sa(e)ft* versus Flemish *sochte*. If Holland took over its coastal dialect from Flanders, and if the latter had rounded vowels, we would expect to find \**soft* in Holland. On the other hand, we do find rounded reflexes in Holland before *s*, *p* and *x*, so maybe it was the *f* of \**sāft-* which occasioned the non-rounded reflex *sa(e)ft* in Holland; in other words, the *f* may have absorbed the roundedness of the vowel.<sup>94</sup>

A different model is proposed by van Loon (2014: 95–6), who connects the difference between western *brochte*, *dochte*, *sochte* and eastern *brachte*, *dachte*, *saechte* with the development of long \**ǣ*. This gave Proto-Frisian \**ē* but Old Franconian *ā*, the latter being a low back vowel, yielding Limburgian \*/o:/ by the end of the thirteenth century (actually /ɔ:/ in modern Limburgian, but usually a short vowel before *cht*). Van Loon thinks that, when \**ā* was denasalized, it merged with /a:/ in Old Franconian, giving \**brāxte* > *brachte*, but with /o:/ in coastal Dutch, giving \**brōxte* > *brochte*; the reason being that coastal Dutch at that time had /æ:/ and /o:/, but no /a:/. If coastal Dutch was the result of a language shift from Frisian to Franconian, this view would have to be reformulated as follows: Old Franconian \**brāxte* was adopted by L1-speakers of Proto-Frisian, who associated the vowel [a:] with their phoneme /o:/, since their other low long vowel, /æ:/, was too fronted. The obvious objection to this solution would be: why did other Old Franconian words in /a:/ not end up with /o:/ in western dialects? This objection pertains both to my interpretation and to van Loon's view. As far as I can see, it can only be countered by assuming that the vowel was still nasalized when it was adopted into the coastal dialects, where a nasalized low vowel was usually rounded. Hence, OFra. \**brāxte* was adopted as (in the shift scenario) or developed into (in the continuity scenario) \**brōxte* in Flanders. As a result, the word cannot tell us much about the vowel quality of WGm. \**ǣ* in those dialects.

Van Haeringen 1923b: 287 explains the wider distribution of *o* in *brocht*, *docht* as opposed to *zocht* from the paradigmatic influence of the present with *brennen* and *denken*, from which the nasal could have been restored.

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94. Jarich Hoekstra adds that, in the Insular North Frisian of Fering-Öömrang, a labi(odontal) context seems sometimes to have blocked rouding: FÖ *maan* 'man' (CNFri. *moon*), FÖ *faan* 'of' (CNFri. *foon*).

### 12.3 Before *l*

The rounding of *a* in \**all-* ‘all’ is best known from Old Dutch *olla uogala* ‘all birds’ (NOM.PL.) in the Rochester verse. All other Old Dutch forms have initial *a-*. In Early Middle Dutch, *ol-* for *al-* ‘all’ is characteristic of West Flemish; see Berteloot 1984a, Map 9. In reality, *ol-* is almost only attested in Bruges, with two more tokens each in Roeselare and Maldegem. The words *als(e)* ‘if, as’ and *also* ‘thus’ appear as *ols(e)* and *olso* only in Bruges; as Mooijaart (1992: 81) has established, only 12 out of 100 clerks use the *o*-form. There is one instance of *olso* in Holland, which might match *oltare* ‘altar’ in Wateringen (1282). Yet the latter form is suspect because the usual form in western Dutch is *outaer* with *l*-vocalization; thus *oltare* might have restored the *l* on the model of *altare*.

Other inherited words with the sequence *-als-* (*hals* ‘neck’, *valsch* ‘false’, *walsch* ‘French’) do not show the rounding in Early Middle Dutch. Since *al* before *t, d* regularly turned into *ol* before becoming *ou* in western and southern Dutch by the thirteenth century, the change to *ol* and *ols(o)* could be due to the tendency to round *a* before *l* plus dentals; the restriction to West Flanders would then imply that the rounding had progressed further in Flanders than in Holland. The rounding is also known from Old Ems Frisian *ölle* and *ölsā* versus western *all, alsā* (Bremmer 2009: 114). But in Old Frisian, lengthening of *a-* to *ā-* preceded the rounding, whereas there is no evidence for lengthening in Flemish.

Note that *al* ‘all’ goes back to PGm. \**alla-*, and had a geminate *ll* in all case forms with a syllabic ending. Other words with a geminate \**ll* do not show the rounding in Early Middle Dutch: compare *gal* ‘bile’ < \**galla-*, *bal* ‘ball’ < \**balla/u-*, *vallen* ‘to fall’ < \**fallan-*, *halle* ‘hall’ < \**xallō-*, *dral* ‘firm’ < \**pralla-*, *wal* ‘wall’ < \**walla-*. Thus, it seems worthwhile to consider the possibility that *al* ‘all’ got rounded in unstressed position, in which it – as a pronominal adjective – often stood. In that case, it would be comparable to the rounding in *of* and *ambocht* (see the next section).

The alternative solution is to assume that Bruges *ols(e)*, *olso* is the forerunner of the later tendency to round *a* before *l* in West Flemish. In modern dialects, *a* is rounded to /ɔ/ before stem-final *l* and *lC* in a larger Flemish area, which comprises the southern half of West Flanders plus an adjacent part of French Flanders; see the map on /ɔ/ in *stal* ‘stable’ in Taeldeman 1979: 51. The GTRP data show occasional instances of the same rounding in ‘stable’ in Zealand and southeastern East Flanders. The vowel is sometimes lengthened. In *vallen* ‘to fall’, the area with rounding is even larger, and includes all of French Flanders, possibly because of initial *v-*. A back vowel [ɔ] is found in *gal* ‘bile’ in Bruges (/hɔlə/) and twice in South Holland, viz. in Delft and Hellevoetsluis (/xɔl/). Willemyns (1997: 192) surmises that *ol*-vocalism apparently was omitted from writing in Late Middle

Flemish (the last known attestation dates from 1391 in Kortrijk), but has always been preserved in speech.

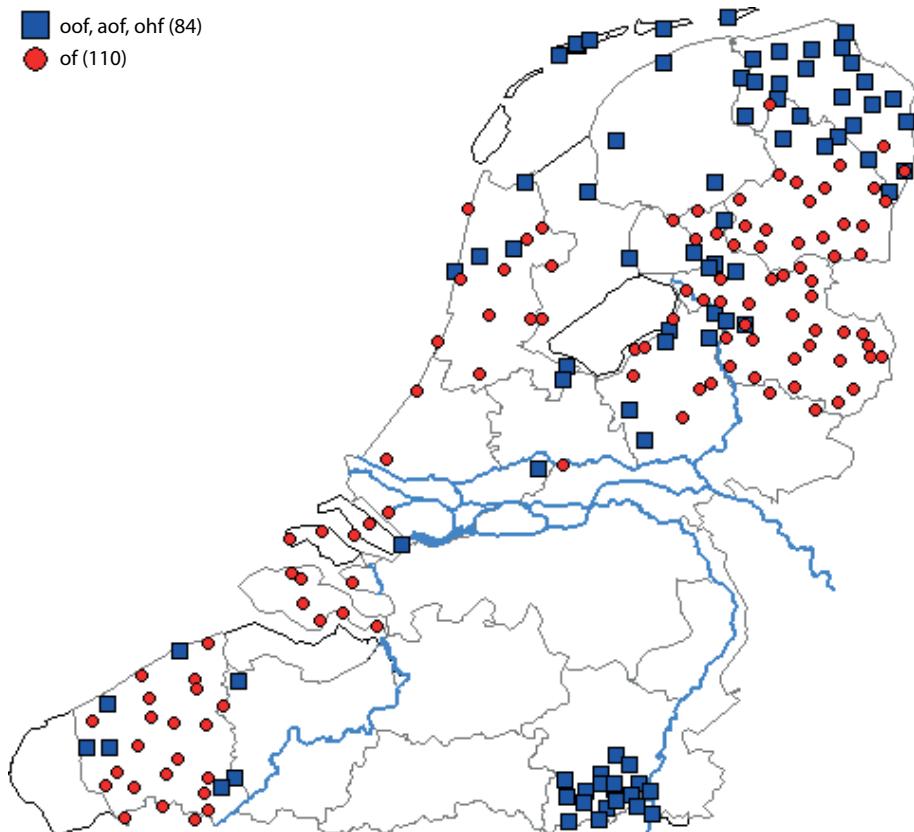
In either case, there is no credible link between the rounding in *all-* and a possible Proto-Frisian substrate along the coast.

## 12.4 Unstressed *a* > *o* near labials

This subsection discusses two isolated forms with a rounded reflex of \**a* in coastal dialects. For one of them, the adverb *of*, Anglo-Frisian offers a parallel but probably independent change, whereas the other is not found in Anglo-Frisian.

1. *of* ‘off’ < \**ab* (OE *of*, OFri. *of*, *af*, OS *af*, *of*). The adverb ‘off, down’ is *of* in thirteenth-century Dutch in all of Holland, Zealand and Flanders. In Brabant and Limburg, the variant *af* competes with *ave* (Berteloot 1984a, Map 10). Mooijaart (1992: 83) claims that *af* mainly occurs as an independent adverb or a verbal prefix, as against *of* when used as the second member of a pronominal adverb (*daarof* etc.), as would be shown by the documents from Corpus Gysseling, no. 566, from Bruges and no. 1040 from Oudenaerde. In Late Middle Dutch we still find *of*, for instance, in North Holland. For modern dialects, *WNT Supplement* writes that *of* occurs in Zealand and Holland, and predominates in West Flanders, the Veluwe, the Achterhoek, Overijssel, Drente and Groningen. The authors of the supplement ascribe the rounding to the unstressed status which the adverb often had (Mooijaart 1992: 83).

Although rounding to *of* is also found in Anglo-Saxon and in Frisian, we cannot simply attribute the Dutch rounding to a Frisian substrate. First of all, the *o*-forms are also found in Gelderland, Overijssel and Drente, for which (with the possible exception of Drente) a Frisian substrate is out of the question, and in Old Saxon. Secondly, the attested forms reflect the lexicalization of two West Germanic variants, \**ab* and \**abō*, OHG *ab* and *aba*, *abe*, ODu. *af* and *aua* (both in the Leiden Willeram), MDu. *af* and *ave*. The short form was generalized in Anglo-Frisian and Low German, it appears. In Early Middle Dutch, the disyllabic variant *ave* is found in Limburg, Brabant, and in literary texts from Flanders, as in *ave saghen* ‘to saw off’ (WBrab., 1275–76), *aue breken* ‘to break off’ (WBrab., EBrab.), *aue comen* ‘to come off’ (WFla., EFla.). In other words: *ave* was a regular variant at least for the independent adverb in all southern dialects, though it was on the retreat in Flanders more than in Brabant and Limburg. This matches the modern distribution of variants quite well, which shows a long vowel /a:f/ or /ɔ:f/ from open syllable lengthening in nearly all Limburgian dialects.



Map 13. Long and short rounded vowels in *af* 'off' according to the *GTRP* database

De Wulf & Taeldeman 2005 discuss the distribution of *of* and *af* in Middle and Modern Dutch dialects on the basis of the corpora of the thirteenth (*VMNW*) and fourteenth (*CRM14*) centuries and of the dialect enquiries of *RND* and *GTRP* in the twentieth century. They note that *of*, besides being regular in West Flanders, Zealand and Holland between 1200 and 1400, is also regularly found in Utrecht and sporadically in the northeastern dialects in the fourteenth century. In the twentieth century, *of* in western Dutch recedes to West Flanders,<sup>95</sup> central Zealand (but not Walcheren) and North Holland, with traces elsewhere.

95. French Flanders is not on Map 13, but data for this region are provided by Ryckeboer 1979: 152 + Map 9. Most of French Flanders has *af*, and only a strip of land bordering on Belgium has *of*. Ryckeboer interprets *af* in France as a relict form. De Wulf & Taeldeman 2005: 125–7, contrariwise, start from their assumption that the allomorphs *af* and *of* depended on the phonetic context. In French Flanders, the generally quite fronted reflex of WGm. \**a* would have led to the generalisation of *af* rather than *of*.

Short, rounded *of* is also found, to the exclusion of *af*, in Overijssel, Drente and – at least in the interpretation of De Wulf & Taeldeman 2005: 120 –, in the province of Groningen. In their explanation, they adopt the theory that the coastal dialects had a grammatically governed alternation between a strongly stressed variant *af* and a weakly stressed variant *of*. This distinction is inspired by the grammar of Old English: beside doublets such as *bī-* vs. *be-* ‘by’, *ūþ-* vs. *þ-* ‘out’, *æt-* vs. *ot-* ‘at-’, Campbell 1959: 30 also recognizes stressed *æf-* (e.g. *æfþunca* ‘source of offence’) versus unstressed *of-* (*ofþýn̥can* ‘to displease’). De Wulf & Taeldeman directly link the alternation between Early MDu. *af* and *of*, as observed by Mooijaart, to this inherited distinction. For the northeast, they (p. 121–3) suggest that this area had a relatively retracted pronunciation of short /a/, such as [v], which led to confusion with short /ɔ/.<sup>96</sup>

In conclusion, the distinction between *af* and *of* may have been stress-related in origin. Most of the coastal dialects, then, but also the northeastern ones from Groningen to Overijssel, generalized the variant *of*. There is no conclusive evidence that *af* > *of* was due to the language contact between Frisian and Franconian in the coastal area.

2. *ambacht* ‘craft’. The noun *ambacht* ‘work, craft; service, jurisdiction’ reflects PGm. \**ambaxti-* (OS OHG *ambaht*, OFri. *ambecht*, *amb(e)t*, OE *ambiht* ‘office n.; servant m.’, Got. *andbahts* ‘servant’, *andbahti* ‘service’). In Old Dutch it always has *a* or *e* in the second syllable, e.g. *ambacht* in the *Fontes Egmundenses*, and *in villa Wudacres ambachte*, a toponym in Zealand (776 copy 1183–95). In Early Middle Dutch, the western dialects show a variant *ambocht* which is almost ubiquitous in northern West Flanders (Bruges and the smaller towns around it), Zealand and Holland. In East Flanders and Utrecht, *ambocht* is a variant occurring beside *ambacht* (VMNW, Berteloot 1984a Map 11, Mooijaart 1992: 83 and Table 1a). In official texts from South Holland and Zealand, *ambocht* can be found until at least the sixteenth century. Occasionally, a lengthened vowel is found in *amboecht* (in the thirteenth century), as well as a fronted variant *ambucht*, and lengthening plus fronting in *ambuecht* (Holland, Zealand). For the fronting, Mooijaart (1992: 81) compares the more regular fronting of short \**u* in *op* and *vol* in coastal Dutch – but of course that fronting is characteristic of stressed vowels, and is not found e.g. in *bisscop* ‘bishop’. Other words endings in an unstressed syllable in a labial plus /axt/ do not show rounding in any attested Middle or Modern Dutch form, but all of these remained morphologically transparent throughout all stages. Relevant words are compounds in *-pacht* ‘hire’, *-vacht* ‘fleece’, *-wacht(e)* ‘guard’, *-macht* ‘power’, and *versmacht* ‘(it) gets parched’.

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<sup>96</sup>. In fact, for \**o* in open syllable we know that the reverse has happened in northeastern and eastern dialects down to North Limburg, viz. confusion with lengthened \**a*, as in *aver* ‘over’, etc.

Since the geographic distribution of *a* versus *o* in *ambacht*: *ambocht* is similar to that in *af*: *of*, one may suspect a similar cause for the rounding, viz. a development to *o* in unstressed position. The (somewhat) more restricted distribution of rounding in *ambocht* may be due to the fact that the labial consonant did not follow unstressed *a* but preceded it. Thus, the scenario proposed by Mooijaart may be correct: in unstressed syllable, the *a* of *ambacht* was rounded to *o* under the influence of *b*, and the lack of morphological transparency preserved this situation. This happened only in western Dutch, or maybe the *o*-form only survived in western Dutch. One might surmise, as a cause for the geographic division, that the unstressed vowel was reduced sooner in the west than in the east, and hence was sooner liable to be coloured by neighbouring consonants.

## 12.5 Summary

**Table 32.** Summary of the vowel phenomena reviewed in Chapter 12

Change	Coastal vs. inland Dutch	Status in coastal Dutch
<i>long</i> for <i>lang</i> , etc.	yes (Flanders)	imposition from PFri. (possibly)
<i>a</i> > <i>o</i> plus lengthening before <i>*mf</i> , <i>*ns</i> , <i>*np</i> , <i>*nx</i>	yes	imposition from PFri. (possibly)
<i>all-</i> > <i>oll-</i>	yes (Flanders)	internal development
<i>af</i> > <i>of</i> , <i>ambacht</i> > <i>ambocht</i>	yes / partly	internal development

## Loss of nasals before voiceless fricatives

Of the four different contexts in which PGm. \**i*, \**a* or \**u* could stand before a nasal plus a voiceless fricative (\**f*, \**s*, \**p*, \**x*), the position before \**nx* was conducive to loss of the nasal and nasalization of the vowel in all varieties of Germanic, including Gothic. The sequence \**anx* has been discussed above with reference to the rounding of \**anx* to \**onx*. Examples of nasal loss in \**inx* and \**unx* which survive in Dutch are *dicht* ‘tight, closed’ (PGm. \**penxta-*), *gedijen* ‘to thrive’ (\**penxan-*), *licht* ‘light, not heavy’ (\**lenxta-*), *vijl* ‘file’ (\**finxlō-*), *ochtend* ‘morning’ (\**unxtwōn-*), and *vocht* ‘moist’ (\**funxti-*). The other three environments require a closer analysis.<sup>97</sup>

### 13.1 WGm. \**mf*, \**nf*

The sequence \**Vmf* was very rare in West Germanic. The two Dutch words which clearly contained this combination, viz. *zacht* < \**samft-* (see above) and *vijf* ‘five’ < PGm. \**fimf* < Pre-Gm. \**fémfe*,<sup>98</sup> show no trace of a nasal consonant. Even though it is likely that nasal loss before \**f* started in the Anglo-Frisian part of West Germanic, as it did before dental fricatives, it apparently spread further south before \**f* than before \**s* and \**p*.

A different case is West Flemish *uval* ‘poverty, discomfort, illness’, ADJ. *uvallig* ‘disgusting, weak; nice’ (de Bo 1892 s.v. *uival* and *uvallig*), *ouvallig* ‘dirty, sloppy’, with unrounding also in Zealandish *ival*, *ivallig*. In French Flanders, a form *oevallig* is found (Moeyaert 2005). Until recently, the etymology was unknown. WNT s.v. *u(i)val* explains *ival*, *uival* as dialectal variants of *euvel*, *evel* ‘evil’ < \**ubila-*, whilst not excluding influence from a formation in \**ūp-* ‘over, across’. But there is no evidence for the variant \**ūp-* elsewhere in Dutch, nor does the comparison with *e(u)vel* work: there are no other words showing *uu-* for *eu-* or *ie-* for *ee-* in this position in West Flemish or Zealandish. Debrabandere (2007: 147) has identified the correct source, viz. the adjective MDu. *onvallig* ‘poor, wretched’, found in texts from Holland from the fifteenth century. It is cognate with MLG *unvallich*, *unvellich*

97. Cf. Schönfeld & van Loey 1970: 26–7.

98. See Boutkan 1995: 74–5 for the PGm. loss of unstressed \*-e in absolute final position.

'unfortunate, disliked'. Thus, *uival* is identical in form and meaning to MoHG *Unfall* 'bad luck, accident', reflecting Old Franconian \**un-fala-*.

I disagree with Debrabandere on the phonetic details. He argues that *onvallich* became Flemish *oenvallich* which led to French Flemish *oevallig* and West Flemish *uvallig*, but the latter assumption goes against the regular vowel developments of West Flemish, where MDu. /u:/ does not become MoDu. /y:/. Thus, I think that we are dealing with two chronologically different forms. The Middle Dutch form *onvallich* regularly yielded West Flemish \**oenvallich* (cf. Taeldeman 1979: 59–60 for the isoglosses between WFle. *uNC-* and EFle. *oNC-*), which lost its nasal and remained unrestored in French Flemish *oevallig* (and de Bo's *ouvallig*). The forms *uival* and *ieval*, however, presuppose an Old Flemish /y:/, and hence show that, in this particular variant, the negative prefix \**un-* was not restored as it otherwise was. I reconstruct \**unfal-* > \**ūfal-* > Middle Flemish /y:vəl/. Since Dutch *vijf* and *zacht* show nasal loss in all dialects, *uival* may be a relic form showing this regular development, and it does not have to be explained on the basis of a Proto-Frisian substratum. High German *Unfall* is explained (by Seibold 2011) as a Late Middle High German replacement of the earlier compound *un-ge-val*, compare Early MDu. *ongheval*, MLG *ungeval* 'fate, disaster', OFri. *ungefal*. Whereas such a replacement may be true for the written standard, the co-occurrence of the verbs *vallen* and *gevallen* leaves no doubt that \**un-fal-* must be older than \**un-ga-fal-*.

### 13.2 WGm. \*ns

The \**n* was lost before *s*, and \**a* was rounded, in the coastal dialects in the words \**bansa-* ('boes 'cowshed'), \**gans* ('goes 'goose'), and in the name element \**ansu-* (*Os-*, *Oegstgeest*); the details have been discussed in § 12.2.2 above. Reliable evidence for the sequence \**ins* is missing. Two words in \**uns* have nasal loss and compensatory lengthening:

1. WGm. \**dunsti-* 'dust, pollen, chaff' (OE *dūst*, MoE *dust*, MLG *dūst*, MoWF *dúst* 'dandruff') is attested as Early MDu. *dunst* 'pollen, fine flour' (Limburg, 1240), *dost* 'soft hairs of plants' (1401), *donst* 'soft hairs of thistles' (Holland, 1423). To Kiliaan (1599), *donst* and *dонse* are synonyms, which suggests that *donst* developed into *dons* by assimilation of word-final *-st* to *-s*; *dонse* must be the plural of this noun. Early Modern Dutch *duist* meant 'chaff, pollen, down' but has now disappeared from the language. It is not often attested; Kiliaan also mentions it but refers to *donst*. The evidence, though meagre, is not in conflict with the supposition that *duist* was a western Dutch form, as against eastern *donst*.

2. The pronoun *\*uns* ‘us’ has often been discussed in Dutch and German dialectology (e.g. Frings 1926, Kloek 1932, Goossens 1994, *FAND* I: 216). The modern dialects can be divided into four different historical-structural groups (thus *FAND*) as regards their reflex of *\*uns* ‘us’. 1. The central dialects from Utrecht down to South Brabant mostly have the type *Vns* like *ons* in the standard language. 2. The *n* has disappeared, leaving a nasalized vowel in much of Zealand, Holland, western North Brabant and northeastern dialects (e.g. [ø̃.s]). 3. The nasal has disappeared completely in Limburg, leaving a short vowel (e.g. ös ‘us’), and in some South Flemish and some northeastern dialects, where it left a long back vowel or diphthong (e.g. *u.s* or *əws*). 4. The nasal has disappeared completely, leaving a front rounded vowel or diphthong. This is the case in French and West Flanders and in a few archaic dialects of Holland: Flemish *uus*, Volendam *uis*, Ouddorp ös.

Only group 4 is relevant to the question of Frisian-Franconian language contact, since in groups 2 and 3, the nasal has probably disappeared in late medieval or modern times. Kloek 1932 includes a map which indicates the occurrence of probable old (Inguaeonic) nasal loss; see also his discussion in the text (p. 350–6). It seems certain that *uus* (in Zealand) and *uis* (in Holland) were quite generally used in rural dialects in the seventeenth century, see also Boekenogen 2004 for *uis* in North Holland. The coastal Dutch forms go back to Old Dutch *\*ūs* and shared the usual development of inherited *\*ū* in those dialects.

Other words containing PGm. *\*Vns* do not show nasal loss, but they do not have to be regarded as counterevidence to a phonetic rule of nasal loss. In all these cases, it is possible to assume analogical restoration of *n* on the basis of cognate words. For MDu. *bronst*, *brunst* ‘fire, flame’, we can assume influence of the verb *branden* ‘to burn’. MDu. *jonste* ‘favour’ <*\*ga-unsti-*, MoDu. *gunst*, and MDu. *afonst* ‘jealousy’ <*\*ab-unsti-*, had a transparent connection with the verb *onnen* ‘to grant’ at least until the thirteenth century. ODu. *kunst*, MDu. *const*, MoDu. *kunst* ‘art’ is easy to relate to *kunnen* ‘to be able’.

### 13.3 WGm. *\*nb*

The lexemes with *\*a*, viz. *ander* ‘other’, *tand* ‘tooth’ and *smieë/smoeë* ‘smooth’, have already been discussed in § 12.2.3. Among the forms in *\*inp*, the nasal is retained in MDu. *ghesinde* ‘companion; company’ (> *\*gezinne*) > MoDu. *gezin* ‘family’ (*\*ga-sinþ-an-, -ja-*, cf. OE *gesipa*, OS *gisiði*) and *kind* ‘child’ (*\*kinþa-*). MDu. *teende*, *tiende* ‘tithe’ from the ordinal *\*texunþō-/an-* ‘tenth’ (OS *tehando*, OFri. *tegotha*) may have restored *n* after the cardinal ‘ten’.

The nasal was also retained in Dutch *rund* ‘bovine’. This has two Middle Dutch sets of variants, viz. *rint*, *rent* and *runt*, *ront*, which go back to two different Germanic ablaut variants \**xrinþ-* versus \**xrunþ-*. Both have lost the nasal in Anglo-Frisian and Old Saxon (OS *hrīth*, OFri. *hrīther*, MoWF *rier* ‘heifer’, OE *hriðer* < \**xrinþ-*; OE *hryðer* < \**xrunþ-*) but preserve *n* in High German and in all Dutch forms: OHG (*h)rind*, MoHG *Rind*, Old Dutch place-names *Hrindsalis* (near Ghent, 639 copy 941), *Rondeslo* (near Ghent, 1105), Middle Dutch DAT.SG. *rinde* (Limburg, 1220–40), DAT.PL. (WHol., 1282–87), *runt* (northeastern Dutch, 1373–76), *runderen*, *runtvleysch* (Holland, 1377–78), MoDu. *rund*, PL. *runderen*. For more on the etymology and the vocalism of this noun, see § 15.2.4.

Seven lexemes in \**inþ* and \**unþ* provide evidence for nasal loss in (parts of) Dutch:

1. The adjective \**swinþa-* ‘strong, fast’ (OS *swið(i)* ‘strong’, OHG *swind-* in names, OFri. *swithe* ‘very’, MoWFri. *swiid* ‘magnificent’, OE *swiþ* ‘strong’, *swiðe* ‘fast’, Goth. *swinþs* ‘strong’) is attested with a nasal in MoDu. *gezwind* ‘fast’, but without a nasal in a number of different forms. In names, it occurs in the persons *Engel-suit* (Ghent, 840–77) versus *Ger-*, *Rad-*, *Ric-*, *Thiod-suinda* (all 9th c.), in *Suitburgis* (Ghent, 10th c. copy 11th c.), *Sidewif* (12th c.), *Edelswid* (Meesen, WFla., 1185), *Ricswiit* (Assendelft, 12th c.)<sup>99</sup> and in the place-name *Suithardeshaghe* (Holland, 889 and 922, copy 1251–1300; Künzel, Blok & Verhoeff 1989: 339).<sup>100</sup> The adverb *suitio* ‘very’ in the Wachtendonck Psalter probably indicates /swiþo/; note that this text possesses a few other instances of nasal loss before \**p* (see below). In Middle Dutch, *swide* ‘big, strong’ is attested in Melis Stoke’s *Chronicle* from the early fourteenth century and in several texts from the fifteenth century of Hollandish and northeastern provenance. An adjective *zwijdig* ‘manifold’ appears with some Hollandish literary authors of the seventeenth century. Although the word has vanished from the standard language, (traces of) \**swiþ-* are still found in the dialects of Holland, Utrecht, Guelders and the northeast, e.g. *swiet* ‘extraordinary’ in and around Groningen, *swiet* ‘quick, well’ and *swijdig* ‘manifold’ in the Zaanstreek (Boekenoogen 2004: 520), *swīt* in Gelderland and Overijssel, and *swīt*, *swīd*, *swīth* ‘very’ in East Frisian (cf. WNT s.v. *zwijd*, de Grauwé 1979–82 II: 315–6, Weijnen 2003 s.v. *swied* and *zwie*).
2. MDu. *stide* ‘strong, robust’ < PGm. \**stinþja-* (OE *stið* ‘stiff’, OFri. *stīth* ‘strict’, ON *stinnr*, *stiðr*) also shows the nasal loss: Early MDu. *stide* (WFla. 1287, EHol.

99. Mansion 1924: 115, Tavernier-Vereecken 1968: 143.

100. The explanation of the Early Middle Dutch male name *Sueder*, *zue(e)der* in Holland from \**swinþa-harja-* (thus VMNW) seems uncertain in view of the vowel *e*.

- 1276–1300, Melis Stoke, *Chronicle* ms. C). Late MDu. *stide* is only attested in Flemish and is continued by *stijde* ‘stiff’ in Modern Flemish dialects (see WNT s.v. *stijde*).
3. ‘Abominable’ is translated in the nominative plural by *farkutha /farkūpa* in one of the glosses to the Wachtendonck Psalter (901–1000, copy 1598). It represents the past participle of \**fra-kunnan* (OHG *verchunnan* ‘to despair’, MHG *verkunnen* ‘to ignore’), cf. Goth. *frakunþs*, OE *forcūð* ‘despised’. The simplex ODu. *kund*, MDu. *cont*, MoDu. *kond* ‘known’, however, never shows nasal loss in Dutch (as opposed to OS *cūþ*, OFri. *kīþ*). Of course, *n* may have been restored from the presents *kunnen* and *kennen*. De Grauwé (1979–82 I: 85–8) notes the rarity of nasal loss before *th* in Old Dutch (only in *sūthon* ‘South’, *swīþo* ‘very’, also *hlōtha* ‘praeda’) and signals the absence of the word family of \**frakunnan* in Old Saxon. He proposes that *farkutha* was a direct loan from Old English. Yet both \**sūþ-* and \**swīþ-* are well attested in Dutch, so that the argument in favour of an Old English origin for *farkutha* is only based on the absence of \**frakunnan* in Old Saxon. Since the verb is attested in High German, there is no need to exclude that it may have existed in Old Dutch, too.
  4. West Germanic \**munþa-* ‘mouth’ is attested as *mund*, *munt* in all literary attestations of Old Dutch. The feminine \**munþō-* ‘opening, embouchure, estuary’ survives in ca. twenty-five Old Dutch toponyms indicating the ‘mouth’ of a river.<sup>101</sup> In general, toponyms from Flanders, Zealand and Holland show *mūtha* (sg.) or *mūthon* whereas toponyms further east have *munda*. Also, Rentenaar (2006: 202) observes that the earliest attestations of names in *-muiden* are generally a few centuries earlier than those in *monde*: *muiden* appears in names from the eight to tenth century but *monde* in such from the eleventh and twelfth century. Rentenaar infers that “This could certainly imply that the names in *-monde* first became productive in a period when Frankish came to play a more dominant role in the Netherlands and that names in *-muiden* originated from an older speech layer.”

To the first group belong *Diksmuide* in West Flanders (1089 *Dicasmutha*), \**Olmeermuiden* in Antwerp (1119 copy ca. 1250 *Olmeremuthen*), \**Maasmuiden* (772–76 copy 1170–75 *Masamuda*), *Leimuiden* (1001–1050 *Letthemutha*), and \**Rijnsmuiden* (1101–50 *Rinesmuthon*) in South Holland, *Muiden* (1105 *Muthen*) and \**Amuiden* (901–1000 *Amuthon*) in North Holland, \**Hontemuiden* (1148 *Hontemuden*) in the westernmost part of North Brabant, and *IJsselmuiden* (1133 *Islemuthen*) in Overijssel.

<sup>101</sup> See Rentenaar 2006 for this toponym.

To the second group belong *Rupelmonde* (1171 *Rupelmundam*) and *Dendermonde* (1088 *Thenremonde*) in East Flanders, \**Dubbelmond* (1105 *Duplamunde*), \**Giezenmond* (1198 *Gescemunde*), and *IJsselmonde* (1125–30 copy 1420 *Islemunde*) in South Holland, *Egmond* in North Holland (1167 *Ekmunde*), *Lexmond* in Utrecht (ca. 1180 *Lakesmunde*), and *Gemond* (698–99 copy 1191 *Datmunda*), \**Markmond* (1122–45 *Markemunde*), \**Maasmond* (1134 *Masemunde*), and \**Werkenmond* (1101–50 *Wirkenemunde*) in North Brabant.<sup>102</sup>

These names, as far as they still existed after 1200, have kept their respective form, i.e. *-muiden* or *-mond(e)*, until the present day. Names which can be added to the collection in the thirteenth century are *Arnemuiden* (1223 *Arnemuda*)<sup>103</sup> in Zealand and *Muide* (*mude strate* 1266–67) in Ghent. On the Hollandish appellative *mui* ‘depth between two sandbanks just off the coast through which tidal streams run’ from \**mūde*, see Bremmer 1993: 19–20. It also occurs in Groningen as *moede*, *moe* ‘natural seaward water-course in lands outside the sea-dikes’ and in Low German *müde* ‘lock (in a river or canal), ‘discharging sluice’, ‘harbour’.

5. The words *zuid* ‘south’ (\**sunþa-*), *zuider* ‘southern’ (\**sunþ(a)ra-*) and *zuiden* ‘South’ (\**sunþan-*) show the most widespread loss of the nasal in Dutch. In fact, here the nasal is only preserved in a few toponyms: *Zonderwijk* in southeastern North Brabant (1240 *Sonderwic*), and probably also *Zundert* in western North Brabant, attested as *Sunderda*, *Sunderde* in the twelfth century, though there is an alternative etymology for this name (Van Berkel & Sampsonius 2006: 527). All Dutch names and appellatives beside the ones mentioned have the form ODu. /su:þ-/; MDu. *suud-*; MoDu. *zuid-*. Most of the Old Dutch attestations of *suth-* come from the western provinces: it occurs in glosses from French Flanders (Orosius glosses) and Holland/Utrecht (wind names), in the Leiden Willeram (from North Holland), and in toponyms with a first element *suth-* or *suther-* from the coastal provinces and Guelders. However, *suthoron* /sūþōn/ ‘from the South’ also occurs in the Wachtendonck Psalter glosses, which are generally thought to reflect southeastern Low Franconian (cf. De Grauwé 1979–82 II: 260). In Early Middle Dutch, nearly all attestations of *suut(-)* are found in texts from Flanders or Holland, which is simply due to the preponderance of texts

<sup>102</sup>. For *Lexmond*, *Taalmond* and *Zoelmond*, see Blok 1965: 56. He dates the origin of these places to the eleventh century approximately. The town of *Roermond* in Limburg (1135–80 *Roremunt*) does not contain the word ‘mouth’, but ‘mound’, see Schrijnemakers 2014: 733–40.

<sup>103</sup>. The element *Arne-* has been regarded as an Old European hydronym (cognate with German *Ahr*, Italian *Arno*), but van Loon (2014: 223) suggests that it may be due to regular *r*-metathesis in an Old Dutch \**Rinne-mūthon*, with MDu. *rinne*, *renne* ‘canal, gutter’. Compare the French name *Ramue* for Arnemuiden (Guicciardini 1567).

from those regions in the corpus. The forms *sutlec* ‘southerly’ and *sutwent* ‘south wind’ in the Limburgian *Glossarium Bernense* (1240) leave no doubt about the reality of the nasal loss in the southeast. We cannot establish whether this Limburgian form has /u:/ or /y:/. On etymological grounds one would expect the former, but modern dialects have /zy:d/- with a front vowel. It may have been adopted from dialects to the west of Limburg, first of all, from Brabant.

6. Dutch *jeugd* ‘youth’ and *deugd* ‘virtue’ reflect PGm. \*juwunpi- and \*dugunpi-, respectively, and both have lost the nasal in an unstressed syllable. The former noun first developed into WGm. \*jugunþi- (Kroonen 2011), whence OS *juguð*, MLG *jōget*, OFri. *jogethe*, OE *geoguþ*, MoE *youth*, all without *n*, versus OHG *jugund*, MoHG *Jugend*. Except for the oldest form *iuginde* (DAT.SG.) in the Wachtendonck Psalter, all Dutch attestations confirm the northern *n*-loss: ODu. *iugethet* ‘rejuvenated’ (ca. 1100; Leiden Willeram), MDu. *ioget* (Limburg, 1240), DAT.SG. *ijoegede* (WBrab., 1265–70), *iuegt* (EFla., 1290), Late MDu. *joghet*, *yoocht*, MoDu. *jeugd* ‘youth’.

In ‘virtue’, High German has kept the nasal (OHG *tugunt*, MoHG *Tugend*), Low German has both variants (MLG *dogent*, *doget*), whereas the northern languages have systematically denasalized the second syllable: OE *duguð*, OFri. *dugethe*, also ON *dygð*. Dutch again sides with the last group: ODu. *dugath*, *dugeth* ‘virtue’ (ca. 1100, Leiden Willeram; the NOM.ACC.SG. is unattested, the text alternates between *dugath-* and *dugeth-*), MDu. *doget* (Limburg, 1200), *duget* (Lower Rhine, 1270–90), DAT.PL. *dogden* (WBrab., 1265–70), Early MoDu. SG. *deucht*, PL. *deugden*.

7. The extant Old Dutch texts contain no examples of nasal loss in the 3PL. PRES. \*-anþ, which is reflected in Anglo-Frisian (OFri. -ath, OE -að < \*-ōþ) and OS -ath. The only possible exception would be the WPs. gloss *aruethiat* ‘they harass’ (in the Lipsius glosses), of which several editors, such as Quak (1981: 108) have suggested that it may have to be read as \**aruethint*. Quak (2004: 356) offers the alternative solution that *aruethiat* represents – together with several other forms – Old Saxon influence on the language of the WPs., as shown by the preservation of suffixal *j* which is unusual for 10th-century Franconian but normal for Old Saxon. In that case, *aruethiat* contains the regular OS PRES. PL. ending -iat(h) of *jan*-presents. The verb ‘to toil’ is attested both as a *jan*-present (Got. *arbaidjan*, OHG *arbeiten*) and an ō-present (ODu. 1SG. PRET. *aruidoda*, OS 1SG.PRES.SG. *aruithon*, OHG *arbeitōn*).

### 13.4 Interpretation

The evidence points to unrestricted nasal loss in the coastal dialects in the case of \*Vns. Before \*p there is evidence for denasalization in unstressed \*-un- in all dialects. In stressed syllables, n is preserved in *ander*, *tand*, *gezin(de)*, *kind*, *rind/rund* and *mond*, but it has gone in coastal dialects in *smieë/smoeë*, *stide*, *swijd*, *mutha/on* (in toponyms), and nearly everywhere in *zuid*. There is further evidence for denasalization in the (glosses to the) Wachtendonck Psalter, but their geographic origin is uncertain. Since the preservation versus loss of nasals before fricatives cannot be explained by the quality of the preceding vowel, nor by the kind of words involved (such as nouns versus verbs), one of the few remaining options is to invoke syllable structure. This was done by van den Berg (1939). Comparing *vijf* < \*fimf to *ons*, *onze*, he argued that the nasal-before-fricative was only lost if it was tautosyllabic with the preceding vowel, as in \*fimf. According to this hypothesis, \*uns developed into \*üs but inflected \*unse regularly yielded *onze*. Subsequent analogical leveling would explain why not all the evidence agrees with this explanation. Although van den Berg surely overstretched his explanation by including the sequence \*Vnx – in which the nasal is always lost in Dutch –, his solution is attractive for nasal loss before f, s and \*p. It is not immediately clear, however, that the details of van den Berg's hypothesis are correct. Thus, *mond* versus *muide(n)* and *kind* versus *stide* at first sight show the retention of n before word-final obstruent and nasal loss in intervocalic \*np, which is the opposite of what van den Berg proposed.

Table 33 contains a survey of the evidence discussed above, as far as it was not evidently open to analogical restoration of n as in *jonst*, *kunst*. The label 'tautosyllabic nC in Old Dutch' refers to the nominative and accusative form of nouns and adjectives.

The survey does not yield an immediate answer to our question, but it does provide certain clues. For instance, van den Berg's explanation of nasal loss only in tautosyllabic position with the fricative is unlikely to be correct: the nasal was lost in *muide*, *smieë/smoeë*, *stide*, and *uival*, which never had tautosyllabic /np/ or /nf/, and retained in *kind*, *mond*, *rund* and *tand*. The latter forms could be explained from the oblique cases which had a syllable boundary between /n/ and /p/, but this seems hardly likely for all of them. Also, with strong influence of the oblique, one might expect the consonant stem 'tooth' to have acquired i-mutation. The reverse explanation, viz. retention of the nasal in tautosyllabic /np/ and /ns/, is contradicted by the retained heterosyllabic nasal in *ander* and *gezin*, and requires analogical leveling to the oblique in *boes*, *duist*, *goes*, *uis* and *zuid*. It leaves *vijf* unexplained.

An alternative solution is to assume that denasalization was regular in all instances in the coastal dialects, and that it was due to influence from the Proto-Frisian substrate layer. The words with retained n would then be due to the later adoption of the core vocabulary from Franconian. Thus, *kind*, *mond*, *rund*, *tand*, *ander* would

have been introduced from the dominant central and eastern dialects, while nasal-less forms of the substrate language survive in toponyms, such as *-muide(n)* and *zuid*, and in words of low frequency, or which had no counterpart in Franconian: *stide*, *swijd*, *smieë*. For the lexeme ‘south’, we would have to assume that it spread from the coastal area eastwards, maybe along with other terms of navigation, such as *vracht*. The fact that *zonder-* ‘southern’ was homonymous with *zonder* ‘without’ may have played a role in its replacement by *zuid-*. The sequence *mf*, *nf* may have been more liable to nasalization in general in Franconian. The general adoption of substrate forms for \*ns as against \*nþ might be connected to a difference in the target language (Franconian) which we cannot retrieve anymore: maybe Franconian had more nasalization in the former sequence than in the latter.

**Table 33.** Nasal loss before fricatives

	Tautosyllabic <i>nC</i> in ODu.	Heterosyllabic <i>n\$C</i>
With nasal loss at least in some dialects:		
<i>ansu-</i> ‘god’	* <i>ans</i>	oblique
<i>bans, boes</i> ‘cowshed’	* <i>bans</i>	oblique
<i>deugd</i> ‘virtue’	* <i>dugunþ</i>	oblique
<i>duist</i> ‘dust’	* <i>dunst</i>	oblique?
<i>farkutha</i> ‘abominable’	–	* <i>kunþa</i> (NOM.PL.)
<i>gans</i> , <i>goes</i> ‘goose’	* <i>gans</i>	oblique
<i>gezwind, zwijd</i> ‘fast’	* <i>swinþ</i>	oblique; * <i>swinþō</i> (ADV.)
<i>jeugd</i> ‘youth’	* <i>jugunþ</i>	oblique
<i>muide, Muiden, Monde</i> ‘estuary’ etc.	–	* <i>munþō</i>
<i>ons, uis</i> ‘us’	* <i>uns</i>	* <i>unsar(-)</i>
<i>smieë, smoeë</i> ‘smooth’	– (?)	* <i>smanþi-</i>
<i>stide</i> ‘strong’	–	* <i>stinþja-</i>
<i>uival</i> ‘poverty, illness’	–	* <i>unfal-</i>
<i>vijf</i> ‘five’	* <i>fimf</i>	–
<i>zacht</i> ‘soft’	* <i>samft-</i>	–
<i>zuid</i> ‘south’	* <i>sunþ</i>	oblique; * <i>sunþar</i> ; * <i>sunþan</i>
With preservation of <i>n</i> in all dialects:		
<i>ander</i> ‘other’	–	* <i>anþar</i>
<i>gezin</i> ‘family’	–	* <i>gasinþan</i> / * <i>gasinþja-</i>
<i>kind</i> ‘child’	* <i>kinþ</i>	oblique
<i>kond</i> ‘known’	* <i>kunþ</i>	oblique
<i>mond</i> ‘mouth’	* <i>munþ</i>	oblique
<i>rund, rind</i> ‘bovine’	* <i>xrinþ</i> , * <i>xrunþ</i>	oblique
<i>tand</i> ‘tooth’	* <i>tanþ</i>	oblique
<i>wensch</i> ‘wish’	* <i>wunsk</i>	oblique?



## Breaking of *e* to *jo, ju*

One of the Early Proto-Frisian sound changes is the shift of \**e* to *iu* before \**xx*, \**xs*, \**xt*, and \**rx* (Bremmer 2009: 33–4), as in OFri. *fiuchta* ‘fight’, *kniucht* ‘knight’, *riucht* ‘right’, *tiuche* ‘team; parcel of land’. Old Frisian *iu /iu/* of whatever origin yields a falling diphthong *jo /jo/* or *ju /jö/* in Modern West Frisian. The reflex *jo* is particularly frequent in front of velars, as in *wjok* ‘wing’, *rjocht* ‘right’, *njoggen* ‘nine’, *sjonge* ‘to sing’, while palatalization to /ö/ is favoured by a following dental consonant, witness *tsjuster* ‘dark’, *tsjutsk* (obs.) ‘German’, *Sjurdsje* (woman’s name) (Hoekstra 2001: 729). In southern dialects of Fryslân, /jö/ is also found before velars (Hof 1933: 238–42). For the latter reflex, we can posit a developmental sequence \**iu* > *ju* > *jo* > *jö*.

OFri. *tiuche* mainly appears in field names, see Blok 1958 and Boekenoogen 2004: 527. The oldest attestations come from medieval East Frisia and are preserved in charters from the Werden monastery (tenth and eleventh century) in the form *tiochi*, such as in *Notheringtiochi*. In Late Old Frisian, such as the *Landregister* of Slochteren, from ca. 1460, the noun appears as *tiucha* (Hofmann 1972–73: 59). Corresponding modern toponyms are *Tjuche* in Ostfriesland and *Tjuchum*, *Tiuch* in Groningen. A set of Latin dyke regulations from Fivelgo from 1317 mentions *tiuchga* as, possibly, a ‘work team’ (Hofmann 1972–73: 64 and 1973: 9).<sup>104</sup> In modern Groningen dialects, the word *tjucht* ‘group, troupe’ possibly continues this Old Frisian noun. The meaning of *tiuchga* corresponds closely to that of MHG *zeche* ‘group of people with a common task’, MoHG *Zeche* ‘mine, pit’, MLG *teche*, *teghe* ‘parcel of a mine’ (see Hofmann 1972–73: 66–7, 1973: 5–7, 14–5). All the attested forms point to Old Frisian *tioche* or *tiuche* ‘team of people; parcel of land’ from \**texxō-* ‘division, team’ according to Hofmann 1972–73 and 1973.<sup>105</sup> Note that the stage *jo* seems to have been reached in the tenth century in this noun, though not in all dialects.

<sup>104</sup>. Hofmann 1973: 9: “Schon vor dem Jahre 1000 waren die friesischen *tiochen* oder *tiuchen* vermutlich Gruppen von Männern, die sich auf genossenschaftlicher Basis zusammengeschlossen hatten, um gemeinsam Land zu gewinnen und nutzbar zu machen. Das Gewonnene und gemeinsam Genutzte wurde ebenfalls *tiuche* genannt.”

<sup>105</sup>. Other cognates are OE *teoh(h)* ‘company’, ON *té* n. ‘permission’ < \**texwa-*. Blok (1958) had reconstructed \**teuxja-* on account of the *i*-suffix in Old East Frisian and the *i*-mutation in modern dialects there. This reconstruction was followed by Gysseling (1962: 21), but Hofmann (1972–73) conclusively shows that only \**texxō* can explain the attested forms. This must somehow have developed from PGm. \**texwō-*, cf. Kroonen 2013: 515.

The same toponym is attested in medieval Holland, where it must have been adopted from the erstwhile Frisian speakers. The phonetics clearly show this to be the case. In South Holland, Blok 1958 finds *die Langhe Tichte* in Oegstgeest (1387), and in Valkenburg *de Hoge tioch* (1484), *t Juch* (1496) and *'t Jocht* (the present name). In North Holland, the word surfaces as *tuch* (Hargen, 1371), *tich* (Velzen, 13th c.), plural *tichen* (Rinnegom, 1358, Kennemerland, 14th c.), *Ticht* (Velzen, 1460), *tjuch* and *tuck* (Krommenie, 1665 and 1680). Note the presence of paragogic *-t* in various forms. The two South Hollandish names with the spellings *io*, *jo* show the lowering before velars which is also seen in East Frisian. In North Holland, no spelling with *o* is attested, and it is attractive to ascribe this absence to the later date of franconization of North Holland. In other words, in the eleventh century, South Holland was franconized when the local Frisian dialect still had /io/ or /jo/ in \**tiocha* (or even \**tiucha*). In contrast, the Frisian dialect of North Holland had already acquired /jö/ by the thirteenth century, where we only find *ju*, *u* and *i*. The Hollandish combination <*ju*> /jö/ can be due to the strong internal tendency to front /ɔ/ to /ö/ in western Dutch, which is conditioned, among other things, by a preceding *j-* (Schönenfeld & van Loey 1970: 94), compare Du. *juk* 'yoke', and *jong* 'young' beside *juffrouw* 'miss' <*jonk-vrouwe*. Blok (1958: 89) and Gysseling (1962: 21) explain the *i* in *tich(te)* from unrounding in earlier \*/ty:x/ < \**tiuch*. This is in conflict with the relative chronology: unrounding of front rounded vowels in Frisian and in western Dutch is an early medieval change, which would not affect a word borrowed in or after the eleventh century. It seems more likely that Old Frisian \**tiuch* or \**tioch* was borrowed directly, not only as Hol. *tjoch*, but also as *tich*. In the latter form, the second element of the unfamiliar diphthong *io* was absorbed by the velar fricative.

## WGm. \**u* and \**o* in coastal Dutch

Tenslotte is er de chaotische toestand bij de *u*,  
die in het westen in telkens wisselende gebieden, die in het oosten  
bij het areaal met umlaut aansluiten, werd gepalataliseerd.<sup>106</sup>  
(Goossens 1981: 28, also 34–6)

The interpretation of the Dutch reflexes of WGm. \**u* and \**o* ranks as one of the most difficult chapters in Dutch historical phonology (Buccini 1995: 52). In the quotation given above, Goossens even calls the situation chaotic. This qualification is based on the following set of diverging reflexes in western dialects:

- ODu. \**ü* is reflected by the front rounded vowels /œ/ and /ø:/, such as in *mug* ‘midge’, *sleutel* ‘key’, but also by back vowels, as in dialectal *mog* and *slotel* for the same words. The latter forms show no trace of an *i*-mutation factor. Furthermore, the geographic extension of the back vowel reflexes differs per lexeme.
- ODu. \**ü* is reflected by an unrounded front vowel in a number of forms, for instance, in *brig*, *breg* ‘bridge’.
- ODu. \**u* and \**o* without *i*-mutation are reflected by back vowels (e.g., *bos* ‘bush’, *joeng* ‘young’) but also by the front rounded vowels /œ/ and /ø:/ (e.g., *bus* ‘bush’, *vul* ‘full’, *dunder* ‘thunder’, *bleuzen* ‘to blush’, *beuter* ‘butter’). Again, the geographic extension of the back vowel reflexes differs per lexeme.
- ODu. \**u* can also be reflected by *i*, most clearly in Flemish *ip* ‘up’.

An additional complication for comparative reconstruction is the merger, found in part of the Dutch dialects, of WGm. \**u* and \**o* in a single back vowel. At a later stage, it appears, this vowel often split in two allophones or even phonemes depending on the surrounding consonants. In a subset of Dutch dialects, the original distinction between \**u* and \**o* may have survived in the modern distinction between two short rounded back vowels (Goossens 2010).

The present chapter will investigate whether the regionally and temporally differentiated reflexes of WGm. \**u* and \**o* in coastal Dutch can be explained in a language contact scenario, as has been done by several authors, or by internal development. To

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<sup>106</sup>. “Finally, we have the chaotic situation for *u*, which was palatalised time and again in the west, each time in different areas which are connected with the umlauting areas to the east.”

this aim, § 15.1 presents the research history and some preliminaries, § 15.2 discusses the unrounding of  $*\ddot{u}$ , and § 15.3 focuses on unconditioned fronting of  $*u$  and  $*o$ .

## 15.1 Research history and preliminaries

### 15.1.1 Research history

Goossens (1981) has established that there is a structural linguistic border between coastal and inland Dutch as regards their pre-1200 vowel systems. Whereas inland Dutch takes part in primary and secondary *i*-mutation to the same degree as the dialects of Germany, coastal Dutch structurally ignores secondary *i*-mutation on low and back vowels ( $*a$ ,  $*\bar{a}$ ,  $*u$ ,  $*\ddot{u}$ ,  $*\bar{o}$ ,  $*au$ ). This conclusion was also reached by Vereecken in 1938, though on the basis of a restricted number of forms with unconditioned fronting to *u* and *eu*. Her findings are confirmed by Kloek (1950: 73–100), who shows that Afrikaans agrees with traditional South Hollandish dialects on a number of accounts.

Taeldeman (1971) discusses many more forms in detail, in particular for Flemish, but he arrives at the opposite conclusion. According to him, *i*-mutation occurred in coastal Dutch, too. Due to the alleged low frequency of the phoneme /y/ at the Old Dutch stage (Taeldeman 1971: 170, 248), it would have been unrounded to /i/ (as in the type *stik*, *krepel*) or backed to /o/. Taeldeman (1971: 250–5) argues that we must first of all distinguish between PGm.  $*u$  which had remained a high vowel in West Germanic, and PGm.  $*u$  which was lowered to  $*o$  under the influence of a following mid or low vowel (*a*-mutation). For the former vowel, Taeldeman assumes that unconditioned fronting to short rounded  $*y$ / happened in the eleventh or early twelfth century, followed by lengthening and lowering to /ø:/ insofar as the vowel stood in an open syllable.

Goossens 1981 (35–6) essentially returns to Vereecken's view. His main argument is the structure of the vowel system at large, viz. the general absence of secondary *i*-mutation in Flanders, Zealand, and Holland as opposed to its presence in central and eastern Dutch. Goossens arrives at the following, dialect-geographical results:

- a. Words with *u* or *eu* in inland Dutch show *i*-mutation, that is, they go back to  $*\ddot{u}$ ;
- b. Words with *u* or *eu* in coastal Dutch but a back vowel in inland Dutch go back to  $*u$ ;
- c. For words reflecting  $*\ddot{u}$  which have a front rounded vowel in coastal and inland Dutch dialects as well as *u* or *eu* in Standard Dutch, it cannot be decided whether the standard language adopted them from coastal or from inland dialects.

Anthony Buccini (1989, 1992) connects Goossens' findings with developing insights into language contact processes. He posits a transition from Ingvaeanic to Franconian in the coastal zone, whereby native speakers of Ingvaeanic took over Franconian speech, imposing on it some<sup>107</sup> stable elements from Ingvaeanic, or, as I prefer to call it, Proto-Frisian (see Chapters 1 and 8 above). In particular, in order to explain the absence of secondary *i*-mutation in western Dutch, Buccini assumes that there was a systematic difference between the unstressed vocalism of Proto-Frisian and that of Old Franconian. He then suggests that the phonological system of Proto-Frisian was imposed onto the Old Franconian lexicon when L1-speakers of Proto-Frisian learned to speak Franconian.

Buccini's view provides the central working hypothesis for the present investigation. On the topic of the reflexes of WGm. \*u and \*o, Buccini (1995: 52–60) arrives at a detailed hypothesis of the different stages through which these vowels may have gone in the early stages of coastal and inland Dutch. I will summarize his main points.

Central to Buccini's discussion is his preliminary claim that the allophonic distribution of WGm. /u/ and /o/ as a result of *a*-mutation (which he also terms “raising/lowering umlaut”) shines through in the medieval and modern distribution of phonemes (1995: 23, 40–43; see also van Bree 2016: 249–50). In High German, \*u yielded [u] before *u, i, j* in the next syllable and before clusters of nasal plus consonant (NC). In Anglo-Frisian, there were some additional environments which prevented *a*-lowering and thus retained the allophone [u], especially a following single *m* or *n* (e.g., OE *þunor* ‘thunder’, *sumer* ‘summer’) and a preceding labial consonant (OE *ful* ‘full’, *wulf* ‘wolf’). This yields the following contrast in Anglo-Frisian (Buccini 1995: 23):

- \*/u/ in the environments *CuCi*, *CuCj*, *CuCu*, *CuNCV*, *CunV*, *CumV*, *C<sub>lab</sub>**uC*
- \*/o/ in the environments *CoCa*, *CoCo*, *CoCe*

Hence, there were significant differences in the distribution of /u/ and /o/ between the two varieties which came into contact in the Low Countries. Old Franconian would have had a system similar to that of High German, whereas Proto-Frisian would have had the Anglo-Frisian distribution.

Some criticism of this proposal is in order. Buccini contrasts an Anglo-Frisian distribution of \*u and \*o to a High German one, but in his effort to schematize the differences, the High German dialects are treated too much as a monolith. On p. 22–23, he correctly observes that the high reflex \*u is conditioned by the

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<sup>107</sup>. Buccini has focused on phonological issues. As part of the imposition of stable elements, one might also expect syntactic and lexical influence, but see § 8.2.1 on this topic.

environments  $*CuCu$ ,  $*CuCi$ ,  $*CuCj$  and  $*CuNCV$ , and the mid reflex  $*o$  by  $*CuCa$ ,  $*CuCo$  and  $*CuCe$  both in Anglo-Frisian and in High German. But he then implies that the environments  $*CumV$ ,  $*CunV$  and  $*C_{[lab]}uC$  blocked  $a$ -mutation only in Anglo-Frisian: OE *sumer*, *thuner*, *hunig*, *wunat*, *butere*, *ful*, *fugel*, *wulf*, *full* (row iv in Tables 32 and 33). Yet – as Buccini is clearly aware – there are exceptions to this distribution in German, especially in Franconian (Franck 1909: 31–5). For instance, Old Franconian has instances of *fugal*, *fugel-* ‘bird’, a word for which modern eastern Dutch dialects also show lengthening of  $*u$  rather than  $*o$  in open syllable (see, for instance, *FAND II*: 110–111 on *vogel*). Other words showing Old Franconian /u/ rather than /o/ which are relevant to our discussion are *wulf* (frequently beside *wolf*), *buc* beside *boc* ‘he-goat’, *fruma* ‘gain’, and *sumar* ‘summer’. Thus, it seems better not to assume a strict split in the distribution of  $*u$  and  $*o$  between Anglo-Frisian and Continental West Germanic, but a gradual increase of  $a$ -mutation as we go from the North Sea to the Alps. Since we know so little about Old Dutch itself, we must keep an open mind about the possible realization of the short back vowel in the contact variety that became western Dutch. It is quite possible that Old Dutch had  $*u$  rather than  $*o$  in the environments  $*CumV$ ,  $*CunV$  and  $*C_{[lab]}uC$ , and was, in this respect, closer to Anglo-Frisian than to High German.

Obviously, paradigmatic analogy is another factor which must have influenced the distribution of  $*u$  and  $*o$ . Thus, Old High German shows a nominative *gold* ‘gold’ with an INS.SG. *goldu* instead of  $*guldu$ , a present sg. *kan* ‘can’ with a pret-  
erite *konda* rather than (rare) *kunda* (analogical to *dorfta*, *torsta?*), etc. (Braune & Reiffenstein 2004 §32).

For approximately the year 700, Buccini (p. 54) posits the following comparison between “coastal Ingvaeanic” (our Proto-Frisian) and “Frankish” (our Old Franconian). In Proto-Frisian, according to Buccini, *i*-mutation had already run its course, and the allophones *u* and *o* were distributed as in Anglo-Frisian; but in Old Franconian, there was no (phonological) *i*-mutation yet, so that [o] had a wider distribution. In Table 34, the variety resulting from the language contact process is termed “Old Dutch”. It basically contains the same vowels as Old Franconian, although Buccini allows for the possibility that Old Dutch had adopted PFri. /y/ and /u/ before nasals and labials:

**Table 34.** Short  $*u$  ca. 700 CE (adopted from Buccini 1995: 54 with modifications)

Proto-Frisian	Old Dutch	Old Franconian
<i>y</i> (+ <i>i</i> -mutation)	<i>u</i> (and <i>y?</i> )	<i>u</i>
<i>u</i> (+ <i>u</i> , NC)	<i>u</i>	<i>u</i>
<i>u</i> (+ <i>N, labial, l</i> )	<i>o</i> (and <i>u?</i> )	<i>o</i>
<i>o</i> (+ <i>a</i> -mutation)	<i>o</i>	<i>o</i>

For the period around 900, Buccini (1995: 55) posits the application of secondary *i*-mutation in Old Franconian (\**u* > \**y*), and, at the same time, the unrounding of (some instances of) earlier \**y* in Proto-Frisian. In other words, the first row of forms of the previous table is split in two, which yields the following five sets:

Table 35. Short \**u* ca. 900 CE (adopted from Buccini 1995: 54 with modifications)

	Proto-Frisian	ODu.	OFra.	MoDu. examples
i.	<i>i</i> (+ <i>i</i> -mut. & unrounding)	<i>u</i>	<i>y</i>	<i>brug, mug, stuk, kreupel</i>
ii.	<i>y</i> (+ <i>i</i> -mut.)	<i>u</i>	<i>y</i>	<i>vullen, gulden, dun, sleutel</i>
iii.	<i>u</i> (+ <i>u</i> , NC)	<i>u</i>	<i>u</i>	<i>gebonden, hond, tong, zoon</i>
iv.	<i>u</i> (+ <i>N, labial, l</i> )	<i>o</i> (/ <i>u</i> )	<i>o</i>	<i>donder, zomer, wolf, bok, vogel</i>
v.	<i>o</i> (+ <i>a</i> -mut.)	<i>o</i>	<i>o</i>	<i>god, volgen, bos, voor, open</i>

Table 35 represents the adoption of OFra. /*y*/ and /*u*/ into coastal Old Dutch as /*u*. Old Franconian /*o*/ was adopted as /*o*/, though it may have been adopted as /*u*/ in contexts in which Proto-Frisian had [u]. For the Late Old Dutch variety which became Old Flemish (and at a stage predating open syllable lengthening), Buccini then proposes unconditioned fronting of /*u*/ to /*y*/ except where /*u*/ was conditioned by a following cluster *nC* (compare Taeldeman 1971: 223, who shows that fronting was blocked in West Flemish in particular before NC: *moend* ‘mouth’, *doenker* ‘dark’).

This scenario can be contrasted with Old Brabantish, which to a large extent preserved the Old Franconian distribution:

Table 36. Short \**u* ca. 1100 CE (adopted from Buccini 1995: 55 with modifications)

	Proto-Frisian	Old Flemish	Old Brabantish	MoDu.
i.	<i>i</i> (+ <i>i</i> -mut. & unrounding)	<i>u &gt; y / i, e</i>	<i>y</i>	<i>æ, ø:</i>
ii.	<i>y</i> (+ <i>i</i> -mut.)	<i>u &gt; y</i>	<i>y</i>	<i>æ, ø:</i>
iii.	<i>u</i> (+ <i>u</i> , NC)	<i>u</i>	<i>u</i>	<i>ɔ, o:</i>
iv.	<i>u</i> (+ <i>N, labial, l</i> )	<i>o / u &gt; y</i>	<i>o</i>	<i>ɔ, o:</i>
v.	<i>o</i> (+ <i>a</i> -mut.)	<i>o</i>	<i>o</i>	<i>ɔ, o:</i>

Buccini (1995: 56) regards the occasional unrounded reflexes in words of row (i) of Table 36 as “lexical Ingvaeronisms”, which managed somehow to enter Old Flemish from coastal Ingvaeronic. As we will see below, this view may not be tenable.

Furthermore, Buccini points to exceptional words such as *koning* ‘king’, *molen* ‘mill’, *slotel* ‘key’ (StDu. *sleutel*). These had secondary *i*-mutation in Old Franconian but they seem to have had a back vowel /*u*/, liable to unconditioned fronting, in western Old Dutch. Buccini (p. 58) assumes that there was an “elevated variety of Old Dutch” which did not join in the unconditioned fronting (or only reluctantly did so). Faced with the problem of locating such an elevated variety, which

apparently played an important role in the incipient stages of written Dutch, he suggests East Flanders as its epicentre. To my mind, the existence of a different sociolinguistic stratum which could explain the aberrant forms ascribes our problem to the unknowable, apart from the question of whether the scenario is likely in itself. It has not been clearly established that forms like *koning*, *molen* and *slotel* are really different in their dialect-geographical behaviour throughout the centuries than words which show the fronted vowel *eu*. It is hazardous to rely heavily on the forms of standardized written Dutch, as these are generally known to have various sources and do not necessarily reflect the vernacular reality of any given period.

A competing theory is that of van Loon (2014: 56–8, 140–2, 166–73, 204–8). He dismisses the view advocated by Goossens, viz. that *i*-mutation of \**a* was primary whereas *i*-mutation of \**u* was secondary, and that the latter would not have taken place in western Dutch. In van Loon's view, short \**u* was subject to *i*-mutation to the same extent as \**a*, with this difference that its effects do not show up in the Old Dutch spelling.<sup>108</sup> Accordingly, he rejects (on p. 165) Buccini's theory about a possible Ingvaeanic substrate in coastal Dutch, though the only argument he brings is irrelevant. Van Loon remarks that the west retains the suffixes /-kin/ and /-in/ with a high vowel until the fifteenth century (*mannekijn* 'small man', *Lammin* 'little Lambert') but did not adopt an *i*-mutated stressed vowel. If anything, such forms rather confirm Buccini's view, but since these suffixes were productive (and had full versus reduced variants, depending on the number of syllables in the word), it is fairer to say that the forms cannot be used to prove or disprove earlier phonetic changes.

According to van Loon, there are two main reasons why we find less *i*-mutated forms in western Dutch than in the centre and east of the Low Countries: (1) Based on a number of Old Dutch toponyms, he argues that *i*-mutation factors were reduced to schwa sooner in the west, viz. before 900, than in the east. This would explain the absence of *i*-mutation on long vowels in western Dutch (p. 163). (2) Analogical leveling reduced the number of alternating paradigms to a larger degree in the west than in inland Dutch, thus removing a number of *i*-mutated forms (p. 159). Van Loon also supposes that *i*-mutated /y/ often became [o], particularly before /-r/, for instance, in *borstel* (English *bristle*), *schort* 'apron' (G. *Schürze*), *storten* 'to dump'. In other dialects, such as North Hollandish, it would be the

<sup>108</sup>. Van Loon (p. 142) argues that Goossens' view is based on the graphic absence of *i*-mutation in the case of /u/ as opposed to /a/, which is true as regards the research history but not as regards Goossens' own analysis, which is based on structural argumentation. Van Loon makes the mistake of taking written evidence at face value himself when he regards central and eastern Middle Dutch forms such as *monster* 'minster', *monten* 'coins', *molder* 'miller' as evidence for a back vowel: it is generally thought that these words had a front rounded vowel, but the dialects in which we find them did not systematically distinguish front rounded vowels from back vowels in writing (cf. § 15.1.5).

following velar consonants which caused backing of *u* to *o*, as in dialectal *bokken* ‘to stoop’, *rokken* ‘to jerk’, *mogge* ‘midge’.

Like others, van Loon assumes a process of unconditioned fronting of \**u* to explain western, fronted forms such as *lucht* ‘air’, *turf* ‘peat’, etc., which never had an *i*-mutation factor. Like Buccini 1995 (and as summarized above), he also assumes that the fronting took place only in words which retained high /u/ and not in words where the vowel was lowered to /o/ in Late Old Dutch. Finally, like others, he links the high frequency of (inferred) retained \**u* in coastal Dutch to the more frequent occurrence of /u/ in Old English and Old Saxon versus /o/ in Old High German in a number of words, especially near labial consonants (e.g., *wulf*, *veugel*, etc.), pointing among other things to <*u*> in the Wachtendonck Psalter (*genuman* ‘taken’, *stuppot* ‘stopped’, *uulcon* ‘clouds’, *fuluuonon* ‘to stay’; 2014: 58).

Unlike his predecessors, van Loon suggests that the unconditioned fronting of \**u* regularly depended on the presence of Old Dutch *u*-vocalism in the next syllable (p. 170). In this way, OS *sunu* ‘son’, *hnutu* ‘nut’ would directly explain western *zeun*, *neut*, and the nominative singular of ō-stems, which ends in -*u* in Old English as opposed to -*a* in Old High German, would account for words such as *nunne* ‘nun’, *tubbe* ‘tub’, *tunne* ‘ton’, *wulle* ‘wool’, *zeug* ‘sow’. Moreover, the variation between Flemish *zomer* but Hollandish *zeumer* would be the result of paradigmatic variants, witness OHG *sumar*, *sumur*. This is a radically different theory, and van Loon himself mentions a number of reasons why it is problematic, of which the chronology (final -*u* may have been reduced to schwa as early as the ninth century in Flanders) and the phonetics (how can final -*u* cause vowel fronting?) are the most obvious ones. A different reason for unconditioned fronting is given on p. 207–8, viz. the fact that old \**u* is lowered to a mid vowel, usually spelled <*o*>, in most of Dutch. Since the lowered vowel would (threaten to) merge with earlier /o/ from *a*-mutation of \**u*, van Loon suggests that some words with old /u/ would have resorted to fronting “om een te grote lexicale belasting van het foneem /o/ of om homoniemen te vermijden”<sup>109</sup> (p. 207). This preventive fronting would then have to be dated before open syllable lengthening, which reduced the number of words with short vowels. Whereas this motivation for fronting would be more easy to understand in typological terms, it has the disadvantage that it does not explain why certain lexemes were fronted whereas others were not. In his final paragraph on this subject, van Loon assumes a two-step development, phased in time: in the ninth to tenth century, *u*-mutation would have caused the first wave of fronting of \**u*; in the eleventh to twelfth century, the general tendency to lower /u/ to /o/ would have pushed another set of words with /u/ to be fronted to /y/.

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<sup>109</sup>. “in order to avoid a too large lexical load of the phoneme /o/ or to avoid homonyms”.

The unrounding of \**ü* in the type *brigghe, stik* is linked by van Loon (p. 168–73) to the first round of unconditioned fronting of \**u*, etc., mainly because of the concurring isoglosses between both phenomena, and because the unmutated vowels are rarely unrounded. The many words which were fronted from \**u* to /y/ in coastal Dutch would have pushed the earlier, *i*-mutated words such as \**brygge* into unrounding. Apart from the doubts which van Loon himself expresses at this scenario, it may be said in advance of our discussion of the evidence that he does not address the specific restriction of the coastal unrounding to the *ja-* and *jō*-stems.

For the western forms with an unexpected back vowel, such as *koning, molen, slotel*, which have *i*-mutation in the east, van Loon (p. 209–10) proposes that they are due to hypercorrection and arose in the sixteenth and seventeenth century as a result of dialect mixture, particularly in Holland. The vowel *eu* would have been regarded as “ongepast” [“unfitting”] for the higher registers, and was replaced – sometimes regularly, as in *zoon* for *zeun* ‘son’, sometimes hypercorrectly, as in *koning, molen, slotel* – by a back vowel. This view seems unlikely in view of the spread of the *oo*-forms (e.g., *slotel* is found in French and West Flanders), and because *eu*’s of a different provenance (as in *steunen, reus* with \**e*, \**i*, or loanwords such as *kleur*) do not change to *oo*.

I have summarized the main thrust of Schrijver’s theories (2014) on the development of the Dutch vowel systems in §5. He explicitly regards the unconditioned fronting of \**u* to *y* in Flemish as the reflex of a language shift from northwestern Gallo-Romance, or a pre-stage of Old Picardian, to Old Franconian. Since, in his reconstruction, Old Picardian had short /y/, /o/, and /ɔ/, but lacked /u/, he assumes that the speakers of Gallo-Romance identified Germanic /u/ with their /y/. Although his theory is very vague on the distributional details, in particular as regards the developments of short vowels and their chronology, and therefore not very attractive at first sight, the basic idea of a Romance substrate underneath, or Romance adstrate influence onto, southern Dutch seems a plausible option.

In summary, the two main explanatory theories that we can distinguish are between a substrate scenario (Proto-Frisian in the case of Buccini, Gallo-Romance in the case of Schijver) and a native development (in the view of van Loon). All scholars agree on the importance attached to the – first allophonic, then phonemic – distinction between \**u* and \**o* in the West Germanic dialects, with \**u* yielding the proper environment for the unconditioned fronting to short *u* and long *eu* in western Dutch. The distribution of \**u* in the early-medieval western Low Countries would be more of the Anglo-Frisian and Old Low Franconian kind (e.g., \**u* after labials and before single nasal consonants) than of the High German kind. The influence of *i*-mutation is judged differently by different scholars.

### 15.1.2 On the presence vs. absence of an *i*-mutation factor

Seen from the viewpoint of the lexicon as a whole, the presence or absence of an *i*-mutation in West Germanic lexemes was not a binary phenomenon but a scalar one. Many stems had an *i*-mutation factor in all or most forms of their paradigm. Such was the case, for instance, in masculine and neuter *ja*-stems, feminine *ī(n)*-stems, in adjectives of appurtenance in *\*-īna-*, (deverbal) nouns in *\*-īla-*, and in the present tense of *jan*-stem verbs. Such words generally have *i*-mutation in eastern Dutch.

But in other stem types there was more fluctuation between the presence or absence of *i*-mutation. In nominal *i*-stems, word-final *\*-i* was apocopated at an early stage of Old Germanic (post-dating the Early Runic period), after a heavy syllable but not after a light syllable. This led to paradigms in which *i*-mutation affected only part of the forms, viz. those forms in which a posttonic *i* had been retained: generally, these were the oblique case forms (genitive, dative) and the plural. Also, the inflexional type which arose by phonetic development after heavy root syllables was often extended to short-syllable stems (Klein 2004, Boutkan 1995: 64–6). Instances from Old High German are: SG. *gast*, *slag*, INS. *gestiu*, PL. *gesti*, *slegi*, DAT. *gestim* (M.); NOM.ACC.SG. *anst*, *stat*, GEN.DAT. *ensti*, *steti*, NOM.ACC.PL. *ensti*, *steti* (F.). Due to these developments, *i*-stems with a heavy base have for a large part ended up without *i*-mutation in the eastern dialects, with some exceptions. Another complication is that *u*-stems have partly gone over into the *i*-stem inflexion, particularly in the plural.

### 15.1.3 On the allophones \*u and \*o

WGm. \*u and \*o were allophones of the same vowel /u/, with \*o arising through *a*-mutation or “lowering mutation” (Buccini 1995, van Loon 2014: 58). In Standard Dutch, both vowels have merged. Therefore we find Dutch *vos*, *hond*, *bot*, *krom*, *gebonden* and *bok*, *wolf*, *kop*, *vol* with the same vowel, but German /u/ in *Fuchs*, *Hund*, *Butt*, *krumm*, *gebunden* versus /ɔ/ in *Bock*, *Wolf*, *Kopf*, *voll*. It is unclear what the exact distribution of \*u and \*o in Old Low Franconian was. Old Saxon shows *u* rather than *o* when the stressed vowel is followed by *nC* (*hund* ‘hundred’), a single *m* (*sumar* ‘summer’) or *n* (*wunon* ‘to live’), or if it is preceded by a labial consonant (*ful* ‘full’, *wulf* ‘wolf’), cf. Gallée 1993: 57–60. Some *u*-forms may be due to paradigmatic alternations. Similar conditions may probably be assumed for Old Franconian, as has been done by Buccini 1995.

It is well known that some Dutch dialects possess an opposition between two short rounded back vowels, such as between /u/ and /ɔ/, or between /o/ and /ø/, which in traditional Dutch linguistics are written as ó versus ò. It is unclear in which

dialects this opposition directly continues the West Germanic allophony, and in which dialects, on the contrary, the extant opposition arose at some later stage by a split of an earlier unitary phoneme /o/. Furthermore, it is also possible that some of the words in ó and ò directly continue the inherited allophones \*u and \*o, whereas others obey to a conditioning which arose at a later stage (Goossens 2008: 96–7, 2010). Weijnen (1991 Map 98) finds that, in general, eastern Dutch and North Hollandish dialects still possess two different short back vowels. For Limburg, one might compare the Middle Dutch spellings and suggest that the modern distinction continues the inherited opposition between \*u and \*o. The same problem applies, *mutatis mutandis*, to \*u versus \*o in open syllable.

For our purposes, it is less important whether the old distinction is continued in central and eastern Dutch since we are interested in coastal Dutch. Especially in view of the occurrence of unconditioned fronting, we will concentrate on the distinction between *u* and *o* in western dialects.

#### 15.1.4 On closed and open syllables

Any stressed short vowel in open syllable in Late Old Dutch was susceptible to open syllable lengthening. Hence, there are a number of stems ending in a single consonant for which some forms of the paradigm qualified for lengthening whereas others did not (compare for general discussions Schönfeld & van Loey 1970: 30–1, van Loon 2014: 208–13). The ensuing alternations between short and long stem vowels were preserved in the standard language in a number of nouns (*weg*, PL. *wegen* ‘road, roads’, *schip*, PL. *schepen* ‘ship, ships’; similarly the lengthened vowel was preserved in the plural of the nouns *dag* ‘day’, *god* ‘god’, *hol* ‘hole’, *slot* ‘lock’, *stad* ‘town’, *vat* ‘barrel’, and others). In some other cases, the short and long variants were petrified as different nouns (*staf* ‘staff’ vs. *staaf* ‘bar’, *ven* ‘lake on the moor’ vs. *veen* ‘moor’). Mostly, however, the alternation was leveled towards one of the two variants. In adjectives, the short vowel was usually generalized: *glad* ‘slippery’, *smal* ‘narrow’, *vlot* ‘floating, quick’. In *j*-verbs, an alternation arose between forms continuing the *j*-endings (which geminated the preceding consonant, which then blocked lengthening) and others which reflect *i*-endings (in 2SG., 3SG.PRES., 2PL.). For instance, compare Early MDu. *seghes*, *seghet* ‘you say, he says’ from \**sagis*, -*t* but *ic segghe* ‘I say’ from \**saggju*. This alternation was usually leveled towards the short-vowel forms in Modern Dutch, thus *zeggen* ‘to say’. Most of the *jan*-presents with a root vowel \**u* before a single consonant joined the short-vowel class, but a number of verbs generalized the lengthened vowel, e.g. *gebeuren* ‘to happen’ < \**burjan-*, *deunen* ‘to resound’ (but Early MDu. *thunnen*) < \**dunjan-*, *jeuken* ‘to itch’ (but also WFle. *jukken*) < \**jukjan-*.

### 15.1.5 On the graphemics of rounded vowels

The modern standard language unambiguously distinguishes between the spelling <u> for the front rounded vowel /œ/ and <o> for /ɔ/ (when writing dialects, <o> can also be used for short /o/, /v/). For the lengthened counterparts /ø:/ and /o:/, the spellings <eu> respectively <oo>, in open syllable <o>, are used.

This system only established itself in the course of the sixteenth century. In Old Dutch, there was no graphic indication for the fronting of the rounded back vowels. Hence, it can never be excluded that ODu. <u> represents fronted [y] = /y/ or [œ] = /œ/, or that <o> represents a rounded mid front vowel.

In Middle Dutch, the situation is not uniform either. In western dialects, short <u> is generally assumed to reflect a front rounded vowel /y/ or /œ/, whereas <o> indicates a back vowel; cf. Van Loey 1980: 29–31. Goossens (1997: 165) hypothesizes that it was the lack of phonemic short /u/ in western Middle Dutch which cleared the way for using <u> for a front vowel. In Limburg, Cleves/Gelderland, the northeastern dialects, and in many parts of Brabant, a different system applied. These dialects possessed two different short back vowels, for instance, high-mid /v/ and mid-low /ɔ/. They therefore retained the difference between <u> and <o> for the back vowels. As a consequence, the same graphemes <u> and <o> also had to be used for the two front vowel phonemes /y/ and /œ/, cf. van Loey 1980: 30, Goossens 1997: 167. This situation can still clearly be seen in the Limburgian *Glossarium Bernense* from 1240, but also in many Brabantish texts until ca. 1550.

In principle, therefore, we cannot rely on central and eastern <o> and <u> for the distinction of short front rounded vowels. Investigations of separate towns and regions can sometimes shed some light on central and eastern Dutch. For Venlo between 1320 and 1543, van der Meer (1949: 194, 201) claims that <o> is much more common than <u> for unmutated \*u, whereas the reverse holds for \*ü, for which <u> would be the most commonly used spelling. Unfortunately, he does not give a full statistical overview of his data. Note, also, that the distribution of front and back vowels for separate items may have changed its dialect geography over the last 800 years, as van der Meer himself surmises for the preposition *om, um*.

For long vowels, the same basic situation holds, but there are more uncertainties. Depending on the exact period (digraphs become more frequent as time progresses), on closed vs. open syllable (because long vowels take digraphs sooner in closed syllables than in open ones), and on the region, the four main graphemes used for /ø:/ (of whatever etymological source) in Early Middle Dutch are <o>, <oe>, <u> and <ue>. Central and eastern dialects show a preference for the first two of these variants. In the course of Late Middle Dutch, <ue> indicating /ø:/ slowly gets replaced by <eu>. But – at least in central and eastern dialects – the same four graphemes can also be used for long back vowels, which may continue

lengthened \**u* or \**o* as well as the old long vowels \**ü*, \**ö*, and \**au*. The only positive evidence for front vowels in Middle Dutch comes from Flemish (and, to a less extent, Hollandish), where <u> and <ue> usually refer to /y:/ and /ø:/ but not to back vowels (due to the correlation with fronted short \**u* > /y/, /œ/). Thus, if a word with lengthened \**ü* is well represented by western spellings <u>, <ue>, we may decide that it had a front vowel; but the spellings in central and eastern Dutch cannot by themselves inform us about the back or front quality of the vowel.

## 15.2 Unrounding of \**ü*

In spite of the general absence of secondary *i*-mutation in coastal Dutch, a number of words presuppose a stage with a front rounded vowel \**ü*. These words dialectally show an unrounded vowel, as in *brigge* ‘bridge’, *pet* ‘pit’, *evel* ‘evil’, etc. The unrounded forms are particularly frequent in Flemish documents from all periods. In other western regions, unrounding seems to have been characteristic of lower registers after 1600. For instance, in the seventeenth century, *stik* ‘piece’ is used by peasants in the plays of Bredero, and is given for the lower class speech of The Hague in the eighteenth century. In general, the unrounded vowel is prevailingly mid-to-high *i* in Flanders and Zealand, but mid-to-low *e* in Holland; but there is no absolute geographic distinction. For instance, the Katwijk dialect (de Vink 2004: 73) has *krik* and *stik*, but *pet*, *bregge* and *regge*.

The loss of rounding has been variously explained. Heeroma (1935: 86) assumes that *i*-mutation of \**u* did not occur in the coastal dialects, and that /y/ was therefore wholly isolated in the vowel system. When inland Dutch started to impose its dialect on the coastal regions (which in Heeroma’s view were not of Anglo-Frisian stock, but simply a different kind of West Germanic called Ingvaeanic), the coastal dialect “haastte zich” [“hastened”] to eliminate this unusual sound from its phonological system by unrounding it to *i* or *e*. As Heeroma concedes, it remains to be seen why it was only a small subset of the words containing \**ü* (*brigge*, *pit*, *evel*, etc.) which admitted the umlauted vowel /y/ in the coastal dialects in the first place.

A similar view is expressed by Taeldeiman 1971, who assumes that /y/ was simply very rare in the Old Dutch system of Flemish, and was therefore eliminated. Taeldeiman (1971: 243–50) posits the following relative chronology: 1. *i*-mutation, 2. unrounding (in part of the forms), depalatalization (in some others), 3. unconditioned fronting of (part of the words having) \**u* (between 1050 and 1200), 4. open syllable lengthening. As we have seen above, the idea that *i*-mutation generally applied in Old Flemish has become untenable since Goossens 1981. It follows that the unrounded forms cannot be explained in the way envisaged by Taeldeiman.

The order of developments 2 and 3 in Taeldeman's chronology is reversed by van Loon (2014: 169), who argues that the rise of unconditioned /y/ from \*u in the Ingvaeanic dialects pushed the \*ü from *i*-mutation towards an unrounded position, where it merged with \*i.

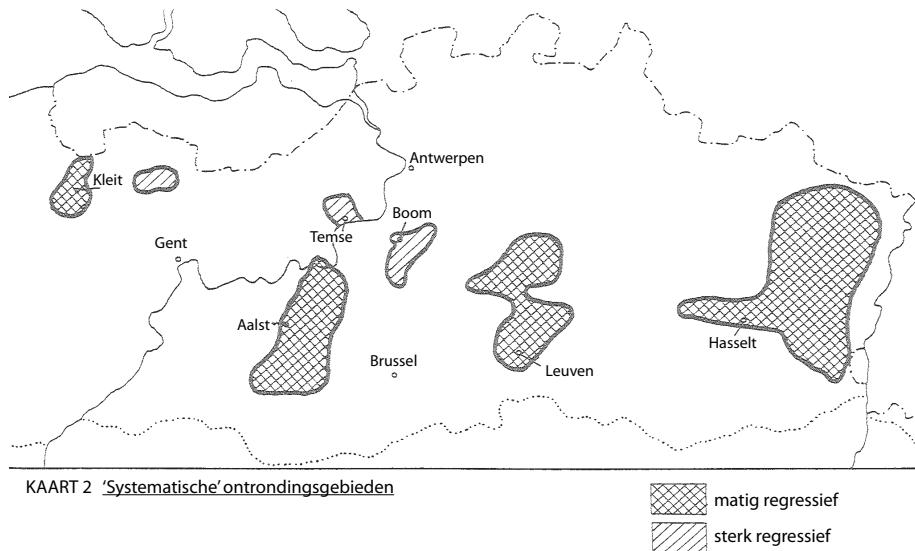
Buccini (1995: 56) regards the unrounded forms such as *brigge*, *pit* and *evel* as "individual words which were somehow transferred from coastal Ingvaeanic to Old Flemish", that is, as exceptions to the rule that the Old Flemish vocabulary in principle represents the vocabulary of Old Franconian, as adopted by the Proto-Frisian substrate of Flanders. The unrounded words would be Proto-Frisian words which managed to survive the language shift to Franconian.

Prior to the discussion of the evidence for unrounding in western Dutch, I must explain that Dutch linguistics distinguishes two historically and geographically different types of unrounding. The first type may be termed *sporadic* unrounding: lexically determined cases of unrounding which are shared by a greater number of (medieval and/or modern) dialects of Flanders, Zealand, Holland. Examples are words such as *brig(ge)*, *breg(ge)* 'bridge', *knekel* 'bone', *hiden* 'to hide'. The second type is the *productive* unrounding of rounded front vowels which a number of modern dialects and dialect areas exhibit. Data from such productively unrounding dialects cannot be used to prove the existence of a medieval process of unrounding due to language contact. Taeldeman (1994: 155) provides a survey of the southern Dutch areas with productive unrounding, which I reproduce in Map 14. He distinguishes areas where the unrounding is still quite alive (group a) from areas where the unrounding has ceased to be productive (group b):

- Group a:
  - a1. A relatively large area in Belgian Limburg (incl. Hasselt).
  - a2. Leuven and a Central Brabantish area around it.
  - a3. An area on both sides of the river Dender (incl. Aalst), on the border of East Flanders and South Brabant.
  - a4. The towns of Maldegem and Kleit in northern East Flanders.
  - a5. Knesselare, south of Kleit (unrounding only of \*ü).
- Group b:
  - b1. The town of Boom (prov. Antwerp) and its surroundings.
  - b2. Temse and southern Sint Niklaas (in eastern East Flanders).
  - b3. The town of Dendermonde (in Map 14, it is the northern tip of the unrounding area of Aalst).
  - b4+b5. Lembeke, Oosteklo, Ursel (northern East Flanders) (unrounding only of \*ü).

From the Netherlands we may add

- c: The town of Egmond-aan-Zee in North Holland and the island of Vlieland.



Map 14. Productively unrounding areas in modern, southern Dutch dialects. From Taeldeman 1994: 155. The indication “matig regressief” [“moderately regressive”] refers to group (a) in the text, the term “sterk regressief” [“strongly regressive”] to group (b).

The geographic spread of the unrounding areas of southern Brabant plus the Dender area, and the fact that the unrounding is a recessive feature, suggest that the area which unrounded rounded front vowels used to be larger. In any case, that is how Goossens (1962, 1992b) interprets the presence of unrounding in regions in a semicircle to the west, north and east of Brussels, and its absence from the capital itself. It can be surmised that unrounding of front vowels remained a feature of lower registers, as is also suggested by its nearly complete absence from older, written sources. Still, sporadic early indications for unrounding exist. For instance, the town of Leuven almost certainly had unrounded its front vowels by the fourteenth century (Van Loey 1960: 145).

For our purposes, the productively unrounding areas have a twofold importance. Firstly, the fact that Brabant already knew such unroundings in the fourteenth century means that instances of unrounding in written texts from the area, or by a hand of unknown provenance, could reflect a productively unrounding dialect. In other words, not all medieval instances of unrounding are connected with the divide between coastal and inland Dutch. Secondly, when investigating the spread of reflexes of WGm. \**ü* in modern dialects, we must always factor out the evidence of these productively unrounding areas.

Below, the evidence for unrounding will be discussed in four subsections. First is the unrounding of \**ü* in closed syllable (the main type *breg*, *pit*, etc.) in § 15.2.1. This is followed by § 15.2.2 on words in which \**ü* (allegedly) stood before *rC*,

because this sequence shows deviating developments in Middle Dutch which must be taken into account. In § 15.2.3, unrounding in open syllable will be reviewed, while § 15.2.4 turns to the remaining forms for which unrounding has been claimed but must be dismissed.

### 15.2.1 Unrounding in closed syllable

Earlier collections of unrounded forms can be found in Franck 1910: 42f., van Loey 1980: 18–9 (for Middle Dutch),<sup>110</sup> Jacobs 1911: 153–6 (for Middle Flemish), Schönfeld & van Loey 1970: 50–2 (for Dutch in general), and van Bree 2016: 254. None of these are exhaustive. The same is true for the present collection, but it does try to incorporate more evidence than its precursors. The main features to which I will pay attention are: the West Germanic etymology, the quality of the stressed vowel, the presence or absence of unstressed -e, the consonant(s) between the stressed and unstressed syllable, and the dialect geography. The evidence appears in alphabetical order of the Modern Dutch entries.

1. *brug, brigge, breg* ‘bridge’ < WGm. \**bruggjō-*<sup>111</sup> F. (OFri. *bregge*, *brigge*, OS *brug-gia*, OHG *brucka*, MoHG *Brücke*, OE *brycg*).

Unrounding is already attested in four Old Flemish place names near Bruges, viz. Eienbrugge (*Heienbriga*, 1187), Hooghebrugge (*Hoghbriggam*, 1129), Kortebrugge (*Cortabriga*, 1113), and Weinebrugge (*Uueinabriga*, *Weinabrigga*, *Weinbrigga*, all 1089). The spelling *-briga* may have been influenced by Celtic place-names in *-briga*, but even so, the identification presupposes vernacular /i/ in the first place. The city of Bruges is attested 82 times between 840 and 1153 (TW, digital edition). It always has <u> except for *Brycge* and *Bricge* in the Anglo-Saxon Chronicle of the eleventh century, which clearly has the Old English rounded vowel (y) and its unrounding (i).<sup>112</sup>

In Early Middle Dutch, <u> is attested in all regions.<sup>113</sup> Unrounded <e> only occurs in western Holland, <i> in Holland, Zealand, and part of the Flemish forms. Mooijaart (1992: 107–8 and maps 17+18) finds a proportional difference between

<sup>110</sup>. The forms *bern* ‘well’, *berste* ‘breast’, *sperte* ‘bar’, *sterfte* ‘throat’, *versch* ‘frog’, *verst* ‘frost’, *vert* ‘rotten’ cannot be used as they arose from the regular metathesis of *rV* to *Vr* before dental consonants. The vowel in such sequences often displays *a*- and *e*-reflexes even without mutation factor; cf. van Loon 2014: 228–30.

<sup>111</sup>. Proto-Germanic \**bruggjō-* arose from a contamination of NOM.SG. \**brugī* < PGm. \**bruwī* and oblique \**bruwjō-* (Kroonen 2011), cf. ON *brú* ‘bridge’ < \**brūwō-*.

<sup>112</sup>. See Miedema 1979 for the English and Frisian evidence for unrounding to *brigge*, *bregge*.

<sup>113</sup>. Berteloot 1984a, Map 49.

*brugge* as an appellative (56% unrounding in East Flanders) as against an element in place-names (only 21% unrounded forms in East Flanders). For both usages, East Flanders has a higher number of unrounded forms than West Flanders, and the city of Bruges hardly ever shows unrounding. I agree with Mooijaart that the latter fact must be ascribed to conservative spelling in charters and maybe to the influence of the Latin and Old French spelling of the name of Bruges.

The final schwa of 'bridge' is retained in all forms in the thirteenth century, with two exceptions. An apocopated form appears in the name *Brigdamme* (Zealand, 1292), *Bricdamme* (Hol., 1291), on the island of Walcheren. The diminutive is attested in Ghent in *ant bruxkin* 'at the little bridge' (1300, CG 2453) and *an tolne brichkin bider oeftbrighen*, 'at the little toll bridge by the main bridge' (1300, CG 2454). These represent two competing diminutives in *\*-kīn*. *Bruxkin* /brökskin/ has the productive insertion of *s* between the stem-final velar and the suffix, whereas *brichkin* /briχkin/ has *-kin* suffixed directly to unrounded *brigh-*. Syncope of internal schwa in trisyllabic *\*bröggekin* and *\*briggekin* is unremarkable in the thirteenth century, so that these forms do not contradict the evidence of the simplex.

The presence of *i* in Flanders and Zealand versus *e* in Holland is confirmed by the later stages of Dutch. In the corpora of CRM14 and MNW, *brigg(h)e* is found in medieval accounts and law texts from the towns of Heinkenszand (in Zealand, 1312), Middelburg (1364/65), Dordrecht (1371, 1399), Zierikzee and Den Briel (on the island of Voorne, South Holland). The variant *breg(ge)* is frequent in Hollandish and Zealandish charters from the Late Middle Ages (see MNW and Heeroma 1935: 12), e.g., Alkmaar *bregge*, Haarlem *bregghe* (1493), Leiden *bregghe* (throughout the 14th c.), Rotterdam *breggelt* 'bridge toll', *bregmeyster* 'bridge master' (1408–14), and Schiedam *bregge*. In the seventeenth century, Huygens uses *bregge* (pl. *breggens*) in his *Korenbloemen*. In toponyms, we have *die Horenbregghe* near Den Haag, and *Terbregghe* near Rotterdam (1524).

In modern dialects, unrounded *brigge*, *bregge* is restricted in Flanders to the westernmost dialects of French Flanders (Verstegen 1943: 303, Ryckeboer 1977: 66, 1979: 141). In mid-twentieth century Zealand, *brigge* only occurred on the former island of Schouwen (WZD 140). A single occurrence of *brig* 'little wooden bridge' is given for Ouddorp on Goeree (Verstegen 1943: 303). For northern South Holland, Heeroma 1935 notes *bregge* in the coastal villages of Scheveningen, Katwijk and Noordwijk, and *breg* or *brèg* in North Holland. The GTRP data still show *breg* in large parts of North Holland (FAND Map 117).

Family names confirm the geographic picture seen so far. In all regions, <u> prevails: *Bruggeman* (Flanders, Overijssel, Goedereede), *Brugman* (*pas-sim*), *Brug(ge)mans* (Brabant, Limburg), *Bruggink* (eastern Dutch), *Van de(r/n)* *Brug* (northern Dutch), *Verbrugg(h)e* (Flanders), *Van der Bruggen*, *Verbruggen* (Brabant). Unrounded forms characterize the coastal areas. The surnames

*Vanderbrigghe* and *Verbrigghe* are mainly found in southern West Flanders. In Holland, *Briggeman*, sometimes *Breggeman*, is concentrated on the South Holland island of Voorne. The syncopated variant *Bregman* is found in larger concentrations in several different municipalities, viz. Rijnwoude (east of Leiden), Zevenhuizen (north of Rotterdam), Drechtsterland and Beemster (both in North Holland). The name *Van der Breggen* is found in South Holland. Thus, we again roughly find *brig-* in the southern coastal dialects but *breg-* in Holland.

2. *Dubbel*, a hydronym in South Holland on the Island of Dordrecht. Probably, the river represented a delta stream which emptied into the Old Meuse near Dordrecht. The etymology is uncertain. The name occurs as ODu. *Duble* in two documents from 1064 (copy middle 12th c.) and 1101, and in the place-name *Duplamonde* (1105) ‘Mouth of the Dupla’. If <p> is original, the voicing found in the other attestations remains unexplained. It seems more likely that <b> is old. Formally, the name could represent a diminutive of WGm. \**dubbō/an-*, found as Early MDu. *dobbe* (hydronym near Leiden, 1280–87) ‘stagnant water, pool, low-lying land’, see EWN s.v. *dobbe*. Yet the river *Dubbel* – as it is reconstructed by historical geographers – seems to have been a natural and sinuous stream, which does not match the meaning of *dobbe*. Maybe the river was derived from the verb PGm. \**duppōn-*, \**dubbōn-* ‘to dip’ as reconstructed by Kroonen (2013: 109–10), whence MDu. *dubben* ‘to submerge; dig out’; compare also PGm. \**dūban-* ‘to dive’ (ON *dúfa*, OE *dūfan* ‘to dive’, MLG *bedūven* ‘to become overwhelmed’). If so, the river may have been called ‘the one that submerges’, viz. by frequently flooding the land.

In the thirteenth century, we find the name with <u> in *ter Dubbelen ward* ‘towards the Dubbel’ (Dordrecht, 1281–82) and with unrounding to <i> in the local surname *Clays vander dibble* (Dordrecht, 1285–86).

Attestations of *Dubbelmonde* and *Dubbeldam* from 1200 to 1421, the year when the village and the Grote Waard area in which it was situated were inundated during the notorious Saint-Elizabeth’s flood, have been collected by ’t Jong & Dorst 2009: 51–71. A Latin text from 1227 mentions *Sigerus de Dublemunde*, another one from 1274–75 writes *Dubbelmonde*. The latter form is the usual one in Middle Dutch texts from the fourteenth century. Unrounded *Dibbelmonde* appears in a text of 1304, and a curious form *Dubbelminde* once in a count’s charter of 1313. After 1350, the name *Dubbelmonde* disappears from the sources.<sup>114</sup>

As to the name in *-dam*, it is first attested in a 1310 charter where *Dubbeldam* is an appellative: *al onse visscherie van Wolbrantskerke toten Dubbeldamme* ‘all our fishing grounds from Wolbrandchurch to the dam in the Dubbel’. In 1318 there is another attestation with the definite article, but in 1359, in *ambocht*

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114. With the exception of one document from 1390 issued by the duke Albrecht.

*van Dubbeldam*, the appellative has lost the article and has become a name. When the inundated area was reclaimed around 1560, the area southeast of Dordrecht was named *Dubbeldam* in recognition of the former settlement. We occasionally find unrounding to *Dibbeldam* in marriage records and local wills from the eighteenth and nineteenth centuries.

The chronology of the attestations confirms what we could suspect on extra-linguistic grounds, viz. that *Dubbeldam* is the later name, which was coined when the river *Dubbel* was dammed in the late thirteenth or early fourteenth century. Logically, the name *Dubbelmonde* then lost its relation to reality and disappeared from usage.

Unrounding is attested for all three names, first in 1285 for the river name itself. The Old Dutch suffix vowel *a* in *Duplamonde* suggests that the name did not contain an *i*-mutation factor. Such a trigger could only have been suffixal *\*j*, but a noun *\*dubljō-* is unlikely to have existed because of the unusual suffix combination. Hence, I suppose that the hydronym originally had a back vowel which was fronted in Hollandish like other words with unmutated *\*u* and *\*o*. It was then unrounded in local speech. However, a preform *\*dubbilō/an-* with early syncope of the posttonic vowel cannot be excluded. In that case, *i*-mutation would be expected, unless the word was an inner-Dutch derivative of unmutated *\*dubbō/an-*.

3. *dun, din* ‘thin’ < WGm. *\*punnja-* << *\*punnu-* (OS *thunni*, OHG *dunni*, OFri. *thenne*, MoWF *tin*, OE *pynne*), see Kroonen 2013: 551 and Heidermanns 1993: 630.

Early Middle Dutch has *dunne* and the derivatives *dunlike* ‘thinly’, *dunheit* ‘thinness’ in Brabant, Limburg and the Lower Rhine area. The verb ‘to thin’ is spelled *donnen* in *Glossarium Bernense* (Limburg, 1240), probably for /dönn-/. In Holland, there is only one attestation of the adjective, viz. *dinne*, whereas in Flanders all 46 tokens have unrounded *dinne*. In Late Middle Dutch, *dinne* is general in Flanders and also occurs with some (western) Brabantish authors, such as Lodewijk van Velthem and Anna Bijns (MNW). In Modern Dutch literary texts, *din-* is restricted to Flanders and Zealand (WNT). Kiliaan (1599), though from western Brabant, makes no mention of a variant *din(ne)*.

In modern Flemish, *denne* or *dinne* is restricted to French Flanders and the larger part of West Flanders, with the exception of its southeastern corner (Verstegen 1943: 302 and Map 4, Taeldeman 1982: 294, FAND I, Map 121). *Dinne* also occurs in Zealand on Walcheren and South Beveland, and in Ouddorp on Goedereede (GRTP database). Strikingly, Zeeuws Flanders does not have unrounding. Note that Zealandish also has *donne* (WZD), for which see § 15.3.2, B.7 on *deun, doon* ‘tight, close’.

4. *dunkēn, dinkēn* ‘to seem, appear; believe’ < PGm. *\*punkjan-* (OFri. *thinza*, OE *pyncan*, OS *thunkian*, OHG *dunkēn*; ON *þykkja*, Got. *þugkjan*).

- The verb mainly appears in the infinitive and the third person singular. The *i*-mutation factor was limited to the present tense. In Old Dutch, an unrounded form *thinket* is found once in the Leiden Willeram (ca. 1100), as against *thunket* three times in the same paragraph of the same text. Sanders (1974: 248, 307) regards this as one of the cases in which the copyist of the Leiden Willeram first introduced his own native form (here unrounded *thinket*) and then reverted to more slavishly copying his model (which had High German *thunket*). In the thirteenth century, Brabant and Limburg have <u> in all instances, but Zealand and Flanders only use <i>. The verb has thereby merged with *denken* ‘to think’, which is here often realized as *dinken* (Mooijaart 1992: 108 and Map 19). In Holland, *dinken* and *dinket* (both occurring once) and *denket* (three instances) are found beside a majority of *u*-forms. Rounded *donk-* occurs several times in Holland and Utrecht in the Middle Ages. The distinction between unrounding throughout in Flanders and the retention of *u* in Holland is preserved in Late Middle and Modern Dutch (see WNT). Because of the merger with *denken*, the forms in *dink-* cannot be used as evidence for unrounding in western Dutch.
5. *gruppe, greppe* and *gruppel, greppel* ‘trench, ditch’ < \**grubjō-* F. and \**gruppilō-* F. (MLG *gruppe* ‘gutter’).

The *jō*-stem is attested with *e* and *i*-vocalism in Late MDu. *greppe* and *grippe* in Flanders, and as *grep*, *grip* in Holland in the seventeenth century. In modern dialects we find *grep(pe)*, *grip(pe)* in Flanders and Zealand (WVD, WZD). Since Middle Low German only has *gruppe*, the *u* of which is confirmed by *grubbe* < \**grubjō-*, it seems likely that western *greppe* and *grippe* are due to unrounding. The *l*-diminutive is attested in *gruppele* ‘trench(es)’ in 1245 (Slicher van Bath 1948: 52), much later in unrounded *grippel* (1578; Zealand/Holland, WNT s.v. *afdelven*), *greppel*, and later still, in the 19th c., as *gruppel*. Modern dialects of Zealand and Flanders have *greppel*, *grippel*.

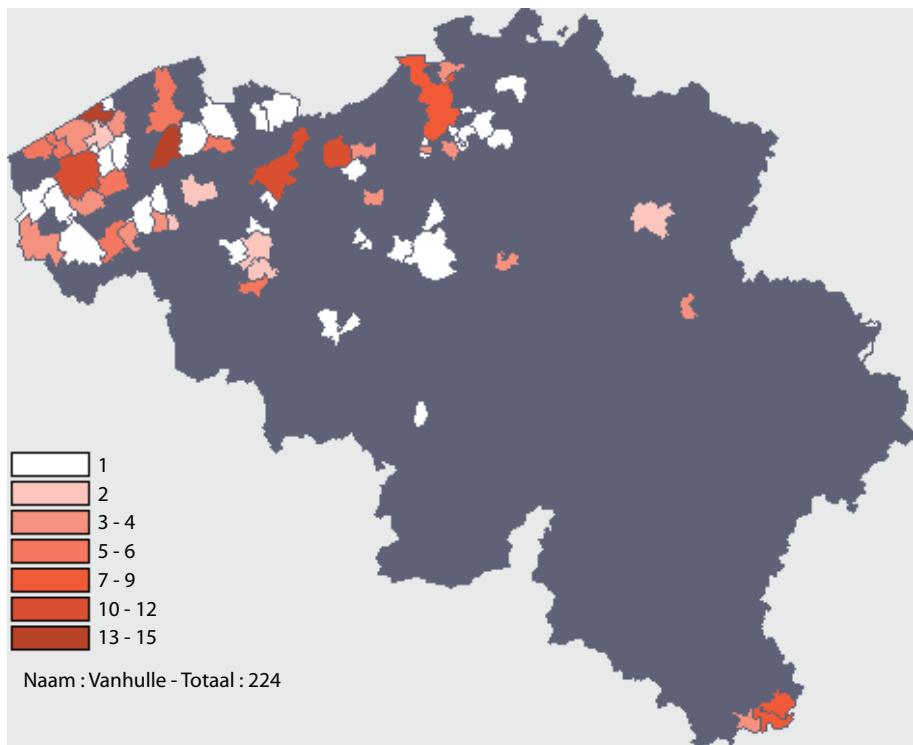
The noun *greb(be)* ‘trench, ditch’ probably represents \**grabjō-* and is therefore irrelevant for the present question. Old Dutch *gribba* ‘trench, ditch’, attested twice in North Holland in the twelfth century (*Fontes Egmundenses*, 1105–20), may either be identical with *grebbe* (in which case the vowel *i* is surprising), or it is an unrounded variant of \**grubjō-*, the source of *grub(be)* ‘trench’ which is mentioned by Kiliaan and found in eastern Dutch.

6. *hul, hil* ‘hill’ < WGm. \**xulli-* M. (MLG *hull*, MoWF *hel*, OE *hyll*, ME *hulle, hil*) < PGm. \**xulli-* (Kroonen 2013: xxxv).

The word is well attested in Old Dutch toponyms.<sup>115</sup> The western ones show unrounding: *Wadhil* (county of Thérouanne, 1066), *de Hillo* (northern France, ca. 1120), *Hil* (1169, copy ca. 1275), *de Hilla* (WFla., ca. 1120), *Hil*, pl.

<sup>115</sup>. See Miedema 1979 for the English and Frisian evidence for unrounding to *hil(l)*, *hel(l)*.

*Hils* (WFla., 1177), *Collaertshille* (WFla., 1149), *Wolfs hil* = *Wuluishil* (Zealand, 1188, 1195–96). The easternmost unrounded form is *Hyllē* (1159), *Hille* (1164, 1186) ‘Hil’ in the province of Antwerp, near Turnhout. Three field names in Gelderland have <u>, viz. *Hulle* and the plurals *Grodenhullen* and *Curtehullen* (all in the village of Gent in Guelders, 1200).

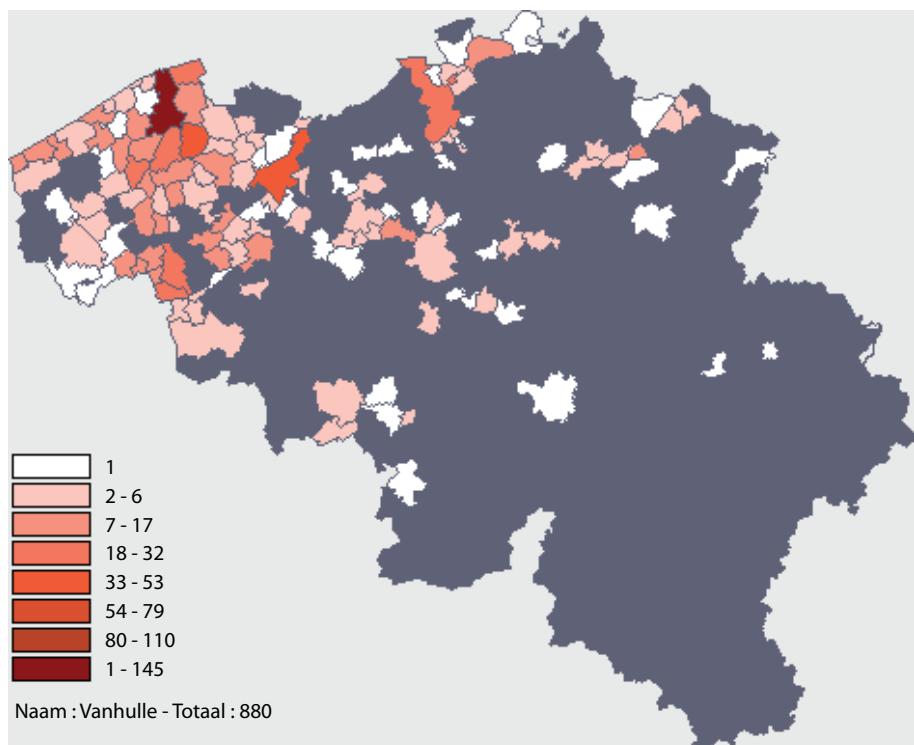


Map 15. *Vanhille* in Belgium

Between 1200 and 1300, the toponym is only attested in coastal dialects. West Flanders and Zealand have only *hil(le)*, Bruges also spells (*h*)*yyl*, as do the (northerwestern) East Flemish towns of Maldegem and Evergem. A toponym *coit hil* is situated near Oudenaerde in the southwest of East Flanders. Also in Oudenaerde, ‘hill-pit’ is attested once as *hilleputte* (1272–91) and once as *helleputte* (1291). East Flanders and the West Flemish town of Kortrijk have *hul(le)*.<sup>116</sup> In all of Flanders, the NOM.ACC.SG. has usually lost final *-e*, witness *die hyl*, *die hil*, *brame*

<sup>116</sup>. Compare Marynissen 1995: 195. Zevergem and Dordrecht in addition show a shift of gender to the feminine: *van dere hulle*, *van ere hulle*. The reality of this shift is confirmed by the surname *van der Hulle*, concentrated on the Zealandish island of Schouwen-Duiveland.

*hil, hul, camackers hul, jeghen den hul*, etc.<sup>117</sup> Endingless forms have also entered the dative singular: *up eenen ul, up ten hil*. Forms in -*e* are either dative singular or nominative/accusative plurals: *ten hille, van den hille, te padden hille, van stalhille, toete hulle, van den hulle*, PL. *die ulle*. The alternative plural *hils* with its Flemish, productive *s*-plural (cf. Marynissen 1995: 216) is found in toponyms. It too presupposes apocope to *hil* in the singular. The forms in the literary text of van Maerlant's *Rijmbijbel* also show *e*-apocope in the singular (DAT.SG. *up eenen ul*) or are compatible with it (NOM. and ACC.PL. *ulle*); but the text does not have the West Flemish *i*-vocalism. An attestation from South Holland has *up den sant hil* 'on the Sand Hill' (Monster, 1298–99).



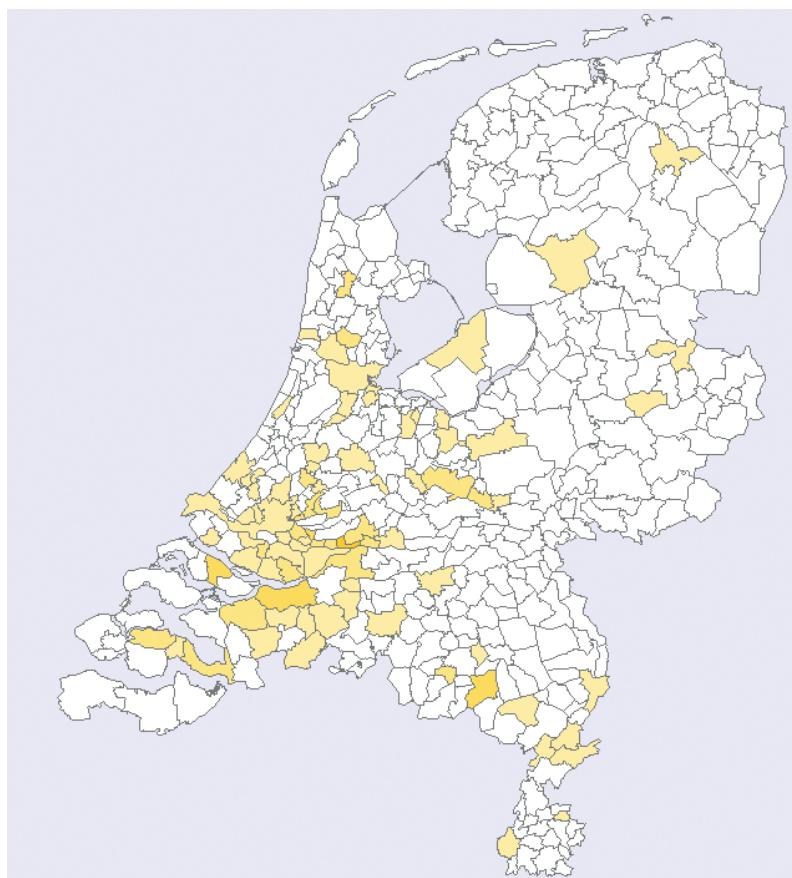
Map 16. *Vanhulle* in Belgium

In Late Middle and Early Modern Dutch, *hil*, PL. *hille(n)* is the usual form found in Flanders, Zealand and Holland. Kiliaan only mentions *hille*, *hil*, and on one occasion calls it antiquated. The lexeme has been replaced by *heuvel*

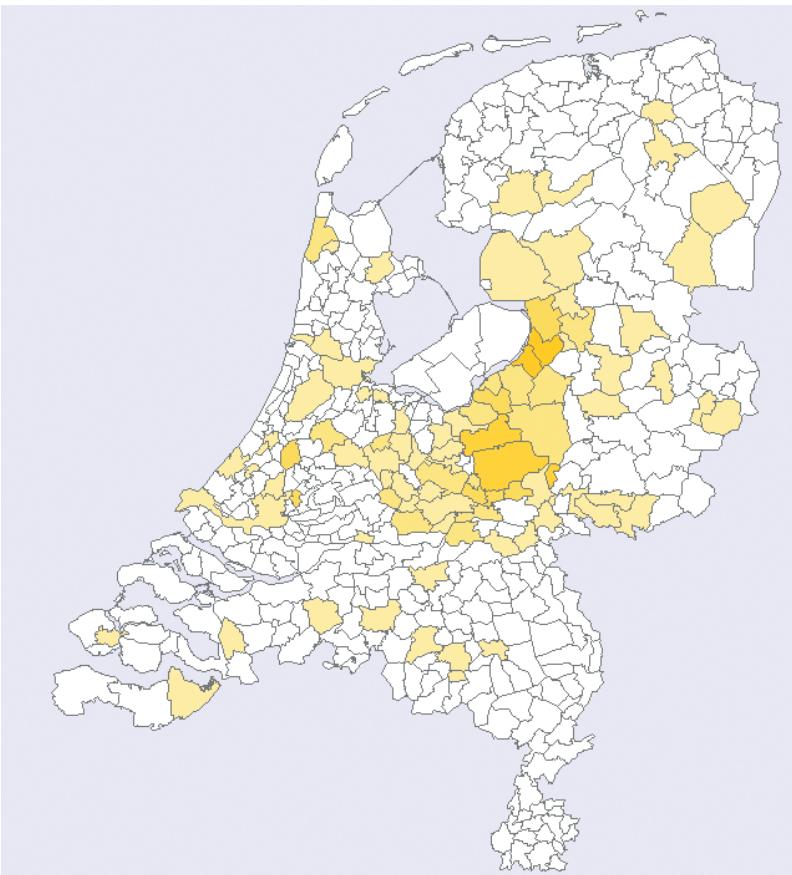
<sup>117</sup> A possible exception occurs in a Bruges text from 1283: *boesthalf an een stic lands heet die hille* 'east of a piece of land called *die hille*'. But *die hille* may also be plural.

in the standard language but *hil* survives in toponyms, as in various names in Westland (south of The Hague), *Piershil* 'Peter's hill' in Hoekse Waard (1514 *Piershille*), *de Witte Hul* near Hilversum, and *Piershil, Ruigenhil, Hooghullen, de Vrakhil* on Walcheren. The word also occurs in several family names. Compare maps 15 to 18 of the names *Vanhill*, *Vanhulle* (both concentrated in West Flanders; situation in 1998), *van den Hil* (southern South Holland, situation in 2005) and *van den Hul* (Gelderland, Overijssel, situation in 2005).

According to WVD I.1: 37–8, (*h*)*il*, (*h*)*ul* is still used for an elevation in a field in northern West Flanders and *passim* in East Flanders, but the dictionary does not give the distribution of the vocalism. Verstegen (1943: 303) mentions unrounded variants in Oostende, De Panne and Wingene in West Flanders.



Map 17. *Van den Hil* in the Netherlands



Map 18. *Van den Hul* in the Netherlands

7. *kruk, krik* ‘crutch, doorknob’, orig. ‘piece of wood with a crossbar’, ‘support’ < PGm. \**krukjō-* ‘staff with a curve’ f. (OS *krukka*, OHG *krucka*, MoHG *Krücke*, OE *cryc, crycc*; OSwe. *krukkia*).

The crutch used to be a symbol of authority, hence the oldest attestations involve names for officials: ODu. *cricwardre* ‘crutch-warden’ (ABL.SG. in Latin context; Bruges, 1193), Early MDu. *cric-houdere* ‘crutch-holder’ = ‘sheriff’ in Bruges and its direct surroundings. The name *crickeman* ‘Krikkeman’ (WFla., 1294) retains internal schwa. The simplex *cricke* f. appears once in the West Flemish *Rijmbijbel* (1285) and as the surname of *Colijn Cric(k)* (Dordrecht, 1286–87). In later medieval texts, *cricke* is usual for Flanders and *crucke* for Brabant. In North Holland, *kreckstoel* ‘chair without back rest’ is found (Egmond, 1485; Boekenoogen 2004: 270). Kiliaan (1599) refers under *krick, kriecke* to *krucke*, which appears to have been the normal word for him. The

unrounded front vowels cited by Kilian may be from unrounding dialects in Brabant or East Flanders, since we also find *cruycke* ‘crutch’ with a long vowel (in *Antwerps Liedboeck*), of which *kriecke* would be the unrounded counterpart.

In Modern Dutch, *krik(ke)* is still found in dialects of Flanders (Taeldeman 1979: 58). Verstegen 1943: 304 mentions Oostende, Kanegem, Marke and Beigem as places which have unrounding. They might point to an erstwhile larger unrounding area. *Krik(ke)* also occurs in Zealand, on the islands of South Holland and in Vlaardingen, Scheveningen and Katwijk (Heeroma 1935: 35–72). *Krek* is the traditional word in North Holland (Boekenoogen 2004: 270, Heeroma 1935).

8. *kunne, kinne* ‘gender, generation’ < PGm. \**kunja-* n. (OS *kunni*, MLG *künne*, OHG *kunni*, OFri. *kenn*, OE *cynn*, MoE *kin*, ON *kyn*, Goth. *kuni* ‘ancestors, kin’).

ODu. *cunni* (WPs.) ‘kin, generation’ has the inherited neuter gender. Its paradigm would have yielded *i*-mutation regularly in all case forms, but in Middle Dutch, we find *kunne* (Limburg, 1240; Lower Rhine, 1250; probably with /ü/) next to *konne* with /o/ (WBrab., 1265–70). The *o*-vocalism is ascribed by EWN to analogy with the verb *connen* ‘to be able’ which seems plausible enough. The usual post-1300 forms of ‘kin’ are *konne* (mainly in western dialects) and *kunne* (in all dialects, including the eastern ones where it presupposes *i*-mutation of \**u*). The noun has acquired feminine gender because of the ending *-e*. Kilian calls both *konne* and *kunne* antiquated, and in the seventeenth century *konne* has disappeared from the literary language. Unrounded variants are very rare: they can be found in the expression *kint ende kinne* ‘child and kin’ (MNW) which survives in West Flemish *kin noch ken* ‘neither kith nor kin’ (de Bo 1892: 448).

9. *-melde, moude*

The place *UUarmelde* in the Utrecht Register of Goods (918–48 copy end of 11th c.) is interpreted as the earliest attestation of the place which is later called *Warmunde* (1063 copy beginning 12th c.), *Warmund* (1201) and *Warmond*, *Wermond* (from the 13th c.), viz. Warmond to the north of Leiden. Gysseling (apud Foerste 1959) and Foerste (1959: 140–4) interpret *Warmelde* as containing an unrounded form of WGm. \**muldjō-* ‘oblong vessel; dip in the dunes’. The variant \**muldō-* without mutation factor is more original within Germanic, and is reflected in MDu. *moude* ‘trough, vessel; skull’, MoDu. *mou(we)* (in toponyms, cf. Boekenoogen 2004: 337), MHG *mulde*, MLG *molde*, *molle*, *molt*, MoE *mould* ‘id.’, ON *-moldi* ‘hill’ (\*-*muldan-*). Old Frisian has *i*-mutation in *meldke* ‘skull’.

The meaning ‘dip in the dunes’ derives from metaphoric usage of \**muld(j)ō-* as ‘low-lying piece of land’ and is confirmed by dialectal *moele* ‘low-lying, wet or marshy plot of land; hollow or depression in a field or meadow’ in southeast

Flanders (*WVD*). A parallel semantic shift can be observed for the lexeme *trog* ‘trough’, used both as ‘trough’ and as ‘low-lying piece of land’ throughout southern Flanders (*WVD*). Foerste explains the replacement of *-melde* by *-munde* in *Warmond* from a conscious renaming, and identifies the replacing lexeme as PGm. *\*mundu-* ‘protection; protected low-lying area’. This replacement may have happened in the process of franconization of the Rhine delta in South Holland in the eleventh century. Foerste (p. 140) also argues that the same Franconian suffix may have been used in the toponym *Hoymunde* (1216) ‘Heimond’ near Naaldwijk in the dunes of South Holland. Near Dunkirk in French Flanders, a toponym *Hoymilla* (1067 copy 1294), *Hoymila* (1183 copy 1369) ‘Hooimille’ is attested, which Gysseling explains as containing an assimilated form of *\*muldjō-*. For an explanation of the first member *Hoy-*, see § 12.2.4.

10. *mug, mig, meg* ‘mosquito, midge’ < WGm. *\*muggjō-* (OS *muggia*, OHG *mucka*, MoHG *Mücke*, MoWF *mich*, OE *mycg(e)*) from PGm. *\*muwī*, *\*muwjō-*, cf. MoSwe. *mygg(a)*, ON *mý*. For the rise of *g*, see Kroonen 2011.

Old Dutch only has the name *Walterus Muggo*. The simplex MDu. *mugge*, MoDu. *mug* is attested from the second half of the fourteenth century. Unrounded forms were usual in traditional dialects of North Holland (*mig*, Boekenoogen 2004: 337, Heeroma 1935: 35–72). In the late twentieth century, according to the *GTRP* database, *mig* was still alive in West Friesland. Heeroma (1935) did not find unrounded variants in South Holland, nor are unrounded variants attested in modern dialects of Zealand or Flanders.<sup>118</sup> Most of the traditional dialects south of the Old Rhine retain final *-e* in *mugge*, *muhhe*, *mogge*. In large parts of Flanders and West Brabant, a variant with a sibilant, such as *meuzie*, is used for ‘midge’ (see § 15.1.3). The absence of unrounded forms in the south as opposed to North Holland, together with the presence of the heteronym *meuzie* in Flanders, suggest that *mugge* was more recently imported into Flemish.

11. *munt* ‘coin’, a loanword from Lat. *monēta* as WGm. *\*munitō-* (OS *munita*, OHG *muniz*, *munizza*, OFri. *mente*, *menote*, *menete*, *munte*, OE *mynet*, MoE *mint*).

The feminine noun is attested once in Old Dutch as *\*muniton* (Prudentius glosses, 950–1000), and in Middle Dutch generally as *mu(e)nte* or *mo(e)nte*, including in Flanders. A single, apparently unrounded instance *minten* PL. is found in a document from Mechelen (WBrab.) from 1297. Since all other West Brabantish documents of the thirteenth century, including those from Mechelen, spell <u>, the hapax *minten* cannot be regarded as an indication

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<sup>118</sup>. Except, of course, in dialects which have systematic unrounding anyway, cf. Taeldeman 1979: 58 for Flanders.

for a larger unrounding area. Still, unrounded *dinne* and *stik* are also found in western Brabant, and *pit* for *put* in the name *Jan van Coelpitte* is also from Mechelen (Berteloot 1984a: 63). In modern dialects, sporadic unrounding of the vowel in ‘coin’ to /æ/ is found in French and West Flanders (GTRP database). Whether this unrounding is old is hard to say; it could be due to labial dissimilation after *m*.

12. *put, pit* ‘pit, well’ < WGm. \**puttja-* m. (OS *putti*, OHG *puzzi*, *puzzza*, MoHG *Pfütze* ‘pool, puddle’, OFri. *pett*, OE *pytt* ‘hole, pit’), a loanword from Lat. *puteus*. ODu. *putte* is attested in the Wachtendonck Psalter. Furthermore, the noun features in a number of toponyms, such as *Puthem* (855 copy 891–910), *Putte* ‘Putten’ in Guelders, *Putthem* ‘Pittem’ (WFla., 1145) and *Stemput* ‘Estaimpuis’ (Hainaut, 1112 copy end 12th c.). Along the coast, these toponyms often have unrounding: *Pichen* (1139), *Pihem* (1192 copy ca. 1215) ‘Pihem’ (near Saint-Omer, France), *Grinberti Pit* ‘Grimberghespit’ (1139), *Colpith* (1186 copy 1775) ‘Colpith’ (near Saint-Omer), *Rorikspit* (NHol., 1091–1100 copy 1191–1210). The town of Petten in North Holland has no unrounding in the oldest attestation *Pathem* if this stands for \**Puthem* (918–48 copy end 11th c.). But <e> shows up in most of the subsequent forms: *Petheim* (1001–50), *Pethem*, and modern *Petten*.

For the Early Middle Dutch distribution of *i* versus *u*, see Berteloot 1984a, Map 50. The simplex *put* and the verb *putten* ‘to pit’ have <u> in all central and eastern dialects, and also in the south of East Flanders (Oudenaerde, Velzeke). Ghent has mostly *i* but also *u*, and in Holland, we also find both *pit* and *putte*. The island of Putten in South Holland always has *u*. The vowel distribution is the same for derivatives (e.g. *clempittere* ‘who digs a clay pit’) and compounds (*clempu/itte* ‘clay pit’, etc.). The only real exception is *Jan van Coelpitte* in a document from Mechelen (WBrab., 1276–1300; CG p. 2866), see above on *minten* for *munten* in Mechelen. Berteloot 1984a notes that it was the same scribe nr. 37 which wrote *i* beside usual *u*.

As for the inflexion, the NOM.ACC.SG. is generally apocopated *pit* in Maerlant’s *Rijmbijbel* as well as in charters from Bruges. Similarly there is an ACC.SG. *pit* in a Hollandish document from Haastrecht (1289, *ghebracht in haren pit* ‘brought in her pit’). The forms *pitte* and *pitten* are dative singular or plural forms. The NOM.PL. *pits* is once attested in *potters pits* ‘potter’s pits’ (Bruges, 1285); compare the plurals *hils* ‘hills’ and *stiks* ‘pieces’. In contrast, unapocopated *putte* in Brabant and Limburg is also used for the nominative and accusative singular. In compounds, as in simplexes, the usual form for the NOM.ACC.SG. is *pit*: *den groedepit* (Ghent, 1280–81), *oest pit* (Maldegem, 1294–1300). Unapocopated *pitte* does occur in a nominative/accusative context in names, though an interpretation as a plural is sometimes possible: *.i.*

*stic merschs dat heet cleenpitte* ‘one piece of moorland called *cleenpitte*’ (Ghent, 1280), *die steenpitte* (Bruges, 1284).

Kiliaan (1599) mentions *pette* and *pet* as Hollandish variants and *pit* for Flanders. This distribution of unrounding is confirmed by later sources. Heeroma (1935: 35–72) found *pet* throughout North and South Holland. The GRTP database has *pit* next to *pet* on the islands of South Holland and Zealand and *pet* in French Flanders and West Flanders; see *FAND* Map 112. For Flanders see also Verstegen 1943: 302 + Map 3, showing that *pit* is typical of French Flanders and most of West Flanders except its southeastern corner. The same distribution of *i* versus *e* is found for *dun* and *rug*.

13. *rug, rig, reg* ‘back, ridge’ < PGm. \**xrugja-* m. (OS *hruggi*, OHG *hrukki*, *rucki*, MoHG *Rücken*, OFri. *hreg*, MoWF *rêch*, *rich*, OE *hrycg*, MoE *ridge*; ON *hryggr*). The noun appears in the Wachtendonck Psalter as *rugki* (NOM.SG.), *ruggi* (DAT. SG.) and *rugis* (GEN.SG.). The toponym Kromb-rugge ‘curved ridge’ (near Merelbeke, East Flanders) appears with unrounding in some of its forms: *Crumbrigga* (988 falsum ca. 1000), *Crumbricga* (1026–50), *Crumbrigham* (966 falsum 990–1035), *Crumbrigga* (977).

In Early Middle Dutch, the same place appears in the dative *van crumbrigge* in a document from Ghent (1298) and *van crombrugghe* in Oudenaerde (1291). The simplex is attested thirty-five times in Early Middle Dutch, mostly in literary sources. Texts from Brabant, Limburg and the Cleves/Guelders area have *rucge*, *rugghe*, as does the one attestation from Ghent. In West Flanders, Bruges has only *ric* /-k/, also in the adverbial expression *over ric* ‘to the back’. The remaining West Flemish attestations come from *Der Natueren Bloeme* and *Rijmbijbel*, which have both *ric* (once *rijc*), *rigge* and *ruc*, *rug(ge)*. The participle ‘backed’ is attested twice in Maerlant’s *Der Natueren Bloeme D* (WFla., 1287) as *gherigghet* and *yrugt*.

As to apocope of *-e*, the forms *ric*, *ricg*, *rijc* and *rig* are found as NOM.SG., DAT.SG., and ACC.SG. in Maerlant’s texts, while *rigghe* is DAT.SG. or DAT.PL. and ACC.SG. The same texts have GEN.SG. *rux* /röks/, DAT.SG. *ruc* /rök/ but also *rugg(h)e*. Two more compounds of Maerlant’s are *rigbeen* ‘backbone’ and *riglanghe* ‘backward’. Thus, it appears that the original form in West Flemish, and maybe also in East Flemish, was \**rigge*, with a geminate velar plosive. It had already been apocopated to NOM.ACC.SG. *rik* in the thirteenth century. The variants with *u* in van Maerlant’s literary works must then stem from more eastern dialects, or from a more recent layer of the language.

In Late Middle Dutch, *rec* is attested for ‘back’ in Haarlem (*Keurboeken*), *reghe* in the *Cartularium* from Egmond (fifteenth century; Boekenoogen 2004: 437), and *rig* in Brielle (Heeroma 1935: 12). *Ric(k)* is normal for Flanders. The distribution of variants in modern dialects is given by *TZN*, map 4.3, and

ANKO I: 78–80; see also Heeroma 1935: 35–72 for Holland, and Verstegen 1943: 302 + Map 5 for Flanders. *Rek* (in French Flanders) and *rik* prevail in the southern coastal dialects, which here include French Flanders, most of West Flanders, the west of Zeeuws Vlaanderen, and all of the remaining Zealand and the islands of South Holland. *Regge* in Terhei, Scheveningen, Katwijk, Noordwijk and Aalsmeer forms the connection to North Holland which has *reg*.<sup>119</sup> *Rugge* (in Flanders) and *rug* (elsewhere) are the main rounded variants to the east of the coastal dialects.

14. *schutte*, -*skitte*, *schette* ‘barrier’ < \**skutjō-* (MoWFri. *sket* ‘fence’).

A water mill near Ghent is called *Clapeskitte* ‘clap-barrier’ in 1162 (copy 12th c.). This may contain an unrounded variant -*skitte* of MDu. (*water*)*schutte* ‘shutting off, barrier, dam’ (Schönfeld & van Loey 1970: 52). In 1298, the toponym *scittingh(e)werf* occurs in three documents from Bruges; *scittingh* is probably the unrounded variant of *schutting* ‘fence’ or ‘lockage’. No other unrounded instances are found in literary Dutch. Modern West Flemish *schette* ‘slat, strip of wood for making a fence or a barrier’ (de Bo 1892: 857, MNW s.v. *schet*; not mentioned in WZD) could represent the unrounded, coastal Dutch reflex of \**skutjō-*, and is thus interpreted by Vercouillie 1925: 301. As ‘hurdle of the stable door’, *schet(te)* is virtually restricted to West Flanders, cf. WVD I.2: 372–3 with map. The vowel *e* instead of *i* is surprising but can be explained from the (West) Flemish tendency to lower short *i* before many consonants (Taeldeman 1979: 57). Compare, for instance, the surnames *Desmidt* and *Desmedt* ‘Smith’ (*De Smit* and *De Smet* would yield a similar picture):

15. *stuk*, *stik* ‘piece’ < PGm. \**stukja-* n. (OS *stukki*, MLG *stücke*, OHG *stucki*, MoHG *Stück*, MoWF *stik*, OE *stycce*, MoE *stitch*; ON *stykki*).

The unrounded reflex *stic* is attested four times in field names from West Flanders in the twelfth century: *Dilentstic* (1162 copy ca. 1225), *Gerlentstic* (1177), and two others (see ONW). Dozens of other field names follow in the thirteenth century, all with *stic* and all from Bruges or adjacent towns such as Maldegem (VMNW). The simplex is attested nearly 2000 times in Early Middle Dutch – half of those tokens in Bruges. Unrounded forms are the rule in all of West and East Flanders, Zealand (though Zierikzee has *u* more often than *i*), and Holland (here *u*-forms also occur). Furthermore, *stick* is also found in Utrecht (once) and in the west of Brabant, in particular, in Mechelen, Willebroek and Antwerp. Compare

<sup>119</sup>. Note that fricativization of intervocalic gg apparently postdates *e*-apocope in Flemish, but predates it in North Holland. The apocope phenomena are not the same, however: in Flanders, -*e* was only lost in words of the type *rik*, *pit* etc. here discussed, while all other words retain final schwa (see Taeldeman 1979). In Holland, final schwa was regularly lost, and in North Holland this happened before intervocalic *d* was syncopated.

Berteloot 1984a, Map 51, Mooijaart 1992: 108, Marynissen 1995: 235–7. The West Brabantish Life of Lutgart, ms. K, has both *stukke* and *stik*.

The usual inflexion in Flanders and Holland is NOM.ACC.SG. *stic*, DAT.SG. *sticke*, NOM.PL. *sticke*, ACC.PL. *sticke(n)*, DAT.PL. *sticken*. The NOM.ACC.PL. also occurs as *stics*, *sticx*, *stix* (Bruges), and the NOM.PL. as *sticker* (Bruges, 1294). These endings were added to the singular *stick* after apocope of *-e*, providing the noun with the productive Flemish plural in *-s* (Marynissen 1995: 239–42; see also s.v. *hil* and *pit* above for other nouns taking this ending) or with the neuter plural ending *-er*. Exceptions without apocope are rare: NOM.ACC.SG. *een sticke lands* (Bruges, 1291), *Solin raet emit contra henrico de art i. sticke lande in sloterhege* ‘Solin Raad bought from Henrik van der Aard one piece of land in Sloterhege’ (Ghent, 1224–27). The latter attestation is more than half a century older than most of the others. The dative singular is endingless in *van enen stic houds* ‘of a piece of wood’ (1286, Dordrecht) as against *an enen sticke* ‘in one go’, *van enen sticke lynen* ‘of a piece of linnen’ also in Dordrecht. Does *van enen stic* have apocope before the following vowel in [h]ouds? Among the *u*-dialects, apocope is not unknown in the southeast: *en stuk vlesg* ‘a piece of meat’ (*Moraalboek*, Cleves/Guelders, 1270–90), *dat stuc lants* (Limb., 1280–90). Yet the usual flexion in the thirteenth century is still NOM.ACC.DAT.SG. *stucke*, NOM.ACC.PL. *stucke(n)*, DAT.PL. *stucken*. Boekenoogen (2004: 518) mention a NOM.ACC. form *sticke* for North Holland, and Heeroma finds medieval *sticke(n)* in Hoorn, Edam, Amsterdam, Haarlem, Leiden, Schiedam, Dordrecht, Middelburg, and in Steenbergen in western North Brabant.

Kiliaan (1599) knows *stick* as a Flemish and Hollandish variant of *stuck*. In literary texts from Flanders and Holland until the seventeenth century, *stick* is still found. In modern dialects, *stik*, *stek* occurs in all of North Holland (Boekenoogen 2004: 518, *GTRP*) and in conservative dialects of South Holland (Heeroma 1935: 35–72, *GTRP*). In Zealandish and in Flemish, *stek*, *stik* is still the normal form in the twentieth century, see *WZD* 938, Verstegen 1943: 300 + Map 1, and the *GTRP* database (*FAND* Map 116).

16. *tocht, tucht, ticht* ‘journey, draught, fruit, education, discipline’ < \**tuxti-* F. ‘draw, drawing’ (OS *tuht* ‘education’, OHG *zuhrt* ‘livelihood, education, offspring’, OFri. *tocht, tucht*, OE *tyht* ‘education; course’, Goth. *us-tauhts* ‘completion’).

In Middle and Modern Dutch, *tocht* is realized with a back vowel *o* or its dialectal fronting *u*, on which see § 15.2. Generally, *tocht(e)* is also found in the coastal dialects. In the modern language, a semantic differentiation arose between *tocht* ‘journey, draught’ and *tucht* ‘discipline’, the latter with a moral and religious connotation.

The only unrounded variant that occurs is the noun *ticht* ‘current which can sometimes be observed at open sea’ (*WNT*), which must be a semantic

specialization of *tocht*, *tucht* ‘draught’. WNT gives only two attestations: from Nicolaas Witsen’s *Scheepsbouw* (Amsterdam, 1671) and from Johannes de Laet’s *Historie ofte iaerlijck verhael van de verrichtinghen der geocstroyerde West-Indische Compagnie* (Leiden, 1644). This would point to the dialect of Holland, but of course the lexeme may have existed in Zealand or Flanders and disappeared later on.

17. *unsel, ensel, unster, enster*, etc. ‘steelyard’ (MLG *unsel, unseler, unsener*, MHG *unzer*, MoWF *ingster*) < Late ODu. \**ünsel* < Latin \**unciale* and Late ODu. \**ünser* < Latin \**unciarius*. For the basis, compare Du. *ons* ‘ounce’ from Lat. *uncia* with Romance palatalization of Latin *c*.

The oldest attestation is *einser* in a Bruges document from 1281/82. It can have *ei-* < *e-* before *nC*, pointing to \**enser* with unrounding of \**ü*. Modern Dutch shows a wide array of variants, collected in WNT s.v. *einsel, unsel* and *unster*. The form *unster* has arisen in the oblique cases \**unsr-* of *unser*. Kiliaan (1599) already mentions a number of unrounded variants of the word. He terms *enster, ensser, entster, unster* Frisian forms for *unsel* ‘scales’. He regards *aeyssel* and *eydsel* as Flemish for *unsel*, and *onghsel* as another variant for *unsel*. Furthermore, Kiliaan gives *unster, unser, unsel*, and *enssel* as four words for ‘bending scales’, and *Wssel* (prob. \**uussel*) is glossed as *unsel*. Thus, *unsel* seems to have been the least marked form to Kiliaan. If *eydsel* is a mistake for \**eynsel*, of which *aeyssel* could render another variant pronunciation, this would be an unrounded variant of StDu. *unster* which is also found in modern dialects. Thus, the oldest forms which the pre-1600 evidence allow us to reconstruct are Late ODu. \**ünser* and \**ünsel*.

Both of them also suffice to explain the modern dialect forms. There is no unrounding in North Holland: *onzer, onster*, earlier also *onsel* (Boekenoogen 2004: 357). A front rounded vowel occurs in Zealand proper (mostly *ulster*, but *unsel* in Zuid-Beveland, Land van Axel, Land van Waas), but unrounded forms are found in Zeeuws Flanders: *ingsel* (western ZVla.), *essele* (Westdorpse), and *uisel* (Land van Hulst) (WZD 1010). West Flemish has *ensel, einsel, insel* (de Bo 1892: 267). The rounded diphthong in *uister* (West Brab.) and *uisel* (Antw.) may be due to rounding of earlier *ei* and hence be equated with “*ui*<sub>2</sub>” (see § 19.5). Note that the simplex *ons* ‘ounce’ has no unrounding, so in theory the rounded vowel could have been restored in *u/onsel* any time.

18. *vrucht, vrecht* ‘fright’ < \**furxti-* (OS *forhta*, MLG *vruchte*, OHG *for(a)hta*, MoHG *Furcht*, OFri. *fruchte*, OE *fyrhtu, fryhto*, Goth. *faurhtei*).

Du. *vrucht(e)* ‘fear’, *vruchten* ‘to fear’ and their derivatives nearly always have <*o*> or <*u*> in all periods. Two exceptions are mentioned by MNW: (1) *Vrecht* is certified by the rhyme with *knecht* in the text *Van den seven vroeden van binnen*

*Rome*, line 909–10 in the edition Stallaert 1889: *Hi ne hief thovet op ende sach den knecht / Die vrese hadde ende vrecht* ‘He [sc. the boar] did not lift up his head nor see the lad / who was in fear and fright’. The text is characterized as Brabantish by De Neef 1897: 5, though we must note some Flemish features such as *stik* and *pit*. De Neef (p. 16) considers that *vrecht* either shows *i*-mutation plus unrounding, or scribal perseveration of *vre-* from the preceding word and synonym *vrese*. (2) The adjective *vrechting* in *Die Rose* by Heinric van Aken, line 2133, occurs in ms. B as a variant of *warachting*. It is generally assumed that Heinric wrote in Brabantish dialect, and for *Die Rose* the investigation of Coun (1994: 210–15) confirms that the original text probably fit the dialect of South Brabant much better than that of Flanders. Still, Coun also notes that (the copyists of) the mss. A and B have sometimes introduced more westerly (= Flemish) features, such as *bat* for *bet*. Thus, though neither *vrecht* nor *vrechting* are sure cases of early unrounding of \**ü*, they could be just that.

19. *wens* ‘wish’ < \**wunskan-* (MLG *wunsch*, OHG *wunsc*, OE *wūsc*, ON *ósk*), *wensen* ‘to wish’ < \**wunskjan-* (OHG *wunscen*, MoHG *wünschen*, OE *wýscan*, ON *ýskja*).

The noun is attested as *wensch* in Early Middle Dutch in Flanders and Brabant and once as *winsch* in Cleves/Guelders. The verb appears as *wenschen* in West Brabant, but a derived frequentative *wonsenen* features in the *Glossarium Bernense* (Limb., 1240). After 1300, we similarly find *e* or *i* in the noun in Flanders, Holland and Brabant, but also *wonsch* in Holland and in northeastern texts (MNW). *Teuthonista* (1477) has *wunsch*, Plantin and Kiliaan know both *wensch* and *wunsch*. For ‘to wish’, the same distribution between *e/i* and *o/u* is found.

In modern dialects, a rounded vowel /ø/ or /œ/ occurs in the verb in three small eastern areas, according to the GTRP data: in Twente (/vø:skən/ etc.), in southeastern Limburg (/wønsʃə/), and in the southern border area between Brabant and Limburg (/woensə/), see Map 19. Of course, it cannot be excluded that some of these dialects have /ø/ or /œ/ from a late rounding of /e/ after *w* (as in Limburgian *zjwömme* from *zwemmen* ‘to swim’), but the geographic distribution (on the periphery of the post-1500 centres of innovation) suggests that these areas may well preserve an archaism, viz. the expected reflex of \**wunskjan*.

The cognate forms from other West Germanic languages leave little doubt that the verb had an *i*-mutation factor whereas the noun did not. It follows that *wonsch* is the expected reflex in the noun, whereas the verb would have been \**wünschen* in Late Old Dutch. The *e* of *wenschen* is then best explained from unrounding of \**ü* (Franck 1910: 42, van Haeringen 1936: 192). The noun *wensch* must have got its vowel from the verb (just like, vice versa, the verb *wonschen*

in some eastern dialects adopted the vowel of the noun). The *e* in *wensch* and *wenschen* in the thirteenth century is found much further east than in other words with unrounding of \**ü*, and also the reflex *i* is conspicuously rare in the oldest phases, unlike in the type *pit*, *pet*. Possibly, then, *wenschen* lost its rounded vowel by dissimilation with initial *w-*, that is, \*[wœ-] > [we-]. Note that the combination *wu-* /wœ-/ , wherever it now occurs in the standard language, has developed from MDu. *we-* (before certain consonants, such as *l*) or *wo-* (from unconditioned palatalization). Thus, [wœ-] must have been a rare or nonexistent combination in Late Old Dutch, which was susceptible to unrounding.



Map 19. Front rounded vowel in *wensen* according to the GTRP database

20. *zonde, zunde*, MDu. *sende* ‘sin’ < PGm. \**sundjō-* F. ‘being guilty’ (OS *sundia*, MLG *sünde*, OHG *sunta*, MoHG *Sünde*, OFri. *sende*, *sinde*). Paradigmatic alternation is expected to have occurred in Late ODu. between NOM.SG. \**sundi* > \**sundi* > \**sund* (no *i*-mutation factor after a heavy syllable) and the oblique cases with \**sundjō-* (with *i*-mutation factor). Apparently, the forms without mutation factor won out in the literary language, contrary to what happened in German and Old Frisian.

In the literary Old Dutch texts we find a strong feminine *sundo* (WPs.), *sunda* (LW), later *sunde*. The derived adjective is *sundig*. In Early Middle Dutch, the simplex is always spelled with a back vowel <*o*> in Flanders. Brabant and Limburg usually spell <*u*>, which can render both /u/ and /ü/. In the texts from Brabant, <*o*>

is found nearly as often as <u>. In the derivatives and compounds with *sonde/sunde*, including *sundere* ‘sinner’, the same geographic distribution of *u* and *o* returns. In the Late Middle Dutch texts from Flanders, *o* remains the main variant (MNW), but in Brabant, *sunde* is still frequent in the period when the spelling <u> (in closed syllable) is used only for a front vowel; this suggests that *sunde* had a front vowel. MNW has a separate entry *sende* ‘sin’ based on a few attestations *sende* and *sinde* in Late Middle Dutch texts, particularly from Brabant. In the vocabularies, we find *sunde* in *Teuthonista* (1477), and Kiliaan (1599) s.v. *sunde* refers to *sonde*.

In the modern standard, *zonde* has escaped regular *e*-apocope because of the conservative influence of religious language, but in dialects, apocope is the rule. Many dialects have fronted [œ]-vocalism. The *GTRP* data show a front rounded vowel in Groningen, Drente, Overijssel and Gelderland versus a low back vowel in Holland, Zealand and Utrecht. In Flanders, the back vowel is exceptionless. Throughout southern and eastern dialects, there is a formal and semantic difference between *zonde* ‘sin’, which was probably borrowed from the standard language, and dialectal *zund(e)*, *zun*, in unrounding dialects *zin* ‘a pity’. For instance, in Dieren (Gelderland) we have *een zonde* ‘a sin’ with /ɔ/ but ‘*t is siùnt* ‘it’s a pity’ with /oe:/. In central and southern Limburg, only front rounded vowels were provided by the informants. I did not find any certain remains of the Middle Dutch unrounded forms *sende*, *sinde*.

The area with /œ/ in ‘sin’ is not the same area as where the unconditioned fronting of \**u* is usually found. Hence, we must assume that the eastern (and central) dialects of Old Dutch generalized the *i*-mutated reflex of \**sundjō-* throughout the paradigm, whereas the coastal dialects generalized the unmuted variant \**sund-*, making the result indistinguishable from a hypothetic preform \**sundō-*. It should therefore be investigated whether MDu. *sende*, *sinde* is not from productively unrounding areas in Brabant, such as Leuven.

21. *zulle, zille* ‘threshold, sill’ < WGm. \**suljō-* f. (MoWFri. *sille*, OE *syl(le)*, MoE *sill*, MoLG *süll*) next to \**swallja-* (OHG *swelli* n., *swella*, MoHG *Schwelle*).

Van Ginneken 1933 assumes that *zulle* reflects \**swelle* < \**swallja-* with a similar contraction of the sequence *CwiC* to *CuC* as in *zuster* ‘sister’ < \**swester* and *zulk* ‘such’ < \**swilk-*. Yet for *zulle*, this etymology is contradicted by the distribution of the variants, as pointed out by WNT and the extant etymological dictionaries of Dutch. Whereas *zuster* has *u* already in all Early Middle Dutch forms, including those of Flanders, and while *zulk* is still realized as *swilk* in thirteenth-century Bruges, we find no trace of *we* or *wi* in *zulle*. The distribution of unrounded *sille*, *zille* exactly matches that of other words with \**ü* in closed syllable.

In Early Middle Dutch, only West Flemish forms of the ACC.SG. *sille*, *zille* are attested. Later in Middle Dutch, *sille* is still found in Flanders versus *zulle*, *oversulle* ‘lintel’ in Brabant, though *sulle* is not unknown in Flemish texts

(MNW, WNT). Kiliaan (1599) has *sille* and *sulle*, but calls the former specifically Flemish. Van Ginneken (1933: 53) has mapped the words for ‘threshold’ in Dutch dialects of the early twentieth century. He depicts a continuous *zelle-zille-zulle* area in French and West Flanders, with inroads into East Flanders; a small *zul*-area in the south of Belgian Limburg; and *zul(le)* in parts of eastern Gelderland, Overijssel and in Drente. In expressions, *zul* was also preserved locally in North Brabant. In view of the front rounded vowel in eastern dialects, it seems likely that *zulle* represents late OD<sub>U</sub>. \**sülle*.

22. *zal, zel, PL. zullen, zellen* ‘shall, will’ < PGm. sg. \**skal*, PL. \**skul-*

The Old Dutch inflexion is relatively straightforward as regards its vocalism: SG. *s(c)al*, *s(c)alt*, (*s)cal*, 1PL.+3PL. *s(c)ule/on*, 2PL. *sculed*, *scult*. In the thirteenth century, we find much more variation within paradigms and between regions; see Franck 1910: 139, van Loey 1976: 88, 90–1, Berteloot 1984a, maps 8, 58, 59, Mooijaart 1992, Tables 3a–d, and VMNW s.v. *sullen*. In the singular, the most frequent vocalism is /a/ in *sal*, *sals*, but *sel* also occurs. In the plural of the present and in the infinitive, the back rounded vowel of *solen*, *sollen* competes with <ue> = /ø:/ in *suelen*, with <oe> in *soel(l)en* – in at least part of the forms <oe> must also represent /ø:/ –, and with unrounded /e/ and /e:/ in *sel(l)en*. The spelling with single <o> in *sol(l)en* normally renders /o/ or /ø:/, but it can in some dialects also represent /ö/ or /ø:/.

VMNW observes that an alternation between forms with and without *i*-mutation (MD<sub>U</sub>. *sullen* vs. *sollen*) is found in all of Dutch and German. The dictionary proposes to explain the mutated forms from the subjunctive of the preterito-present, which ended in WGm. \*-i. The short vowel in Middle Dutch and MHG *zullen*, *sollen* is explained from the reduction of the ending -en to -n in unstressed (auxiliary) position, which would have blocked open syllable lengthening. This solution is possible but not compelling, since we cannot be sure that the alleged reduction of the ending, as reconstructed for this purpose by VMNW, really took place. Alternatively, the short vowel in *zullen* was imported from the 2PL. ‘you shall’, a very frequent form (*gi sult/selt*, beside *solet/selet*), and from the SG. forms *sal*, *salt*, *sal* (thus Franck 1910: 82). Franck (p. 139) stresses the importance of the second person singular of this verb, in its original form *salt* > *sout* and in its subsequent replacements *saelt*, *selt*, *sult*. The regular outcome of \**süllen* was Dutch /zöllen/, of which coastal *zellen* and *zillen* seem to be the unrounded variants (but see below for a different explanation). VMNW summarizes the main developments as follows: 1. \**s(k)ulan-* > MD<sub>U</sub>. *solen*; 2. \**s(k)ülan-* > *suelen*, *soelen*, *solen*, with unrounding *selen*; 3. \**s(k)uln-/s(k)oln-* > *sollen*; 4. \**s(k)üln-/s(k)öln-* > *sullen*, with unrounding *sellen*.

Geographically, Early MD<sub>U</sub>. 1SG.+3SG. *sel* is restricted to texts from Holland and Utrecht and to one document from Cleves which is addressed to the count of Holland (Heeroma 1935, Map 22; Berteloot 1984a: 50). In all of

these places, *sel* competes with *sal*. In the more extensive CRM14 material, the regional character of sg. *sel* is even more clear: it is the usual form in North and South Holland and Utrecht, whereas Zealand has only *sal*. This distribution is still found by and large in modern dialects, cf. Weijnen (1972, 1991: 4, 245). Weijnen 1972 suggests an Ingvaeanic origin of *sel*, which is quite conceivable: the *e* in the sg. *sel* could have arisen from fronting of *sal*, as found in many North Hollandish words with \**a*, cf. §11. Alternatively, *sel* could be interpreted as pretonic vowel reduction in the auxiliary verb form.

In the plural and the infinitive, *e* has a different regional distribution. The variants *s/zolen*, *s/zoelen* are not frequent but can be found in most regions. If anything, Holland, Brabant and the southeastern dialects have these forms more frequently than Flanders and Zealand. Whether *s/zo(e)len* has a back or front vowel is uncertain. With <u> in open syllable, the spellings *s/zule(n)* and *s/zuele(n)*, probably for long /ø:/, are very rare. In Flanders and Zealand, *s/zullen* is the usual form, whereas <o> and <oe> are almost absent there.

Unrounded *s/zelen* occurs in all regions but is particularly frequent in South and West Brabant and in East Flanders, and to some extent also in Holland. *Zelen* also occurs in Bruges. Unrounded *s/zellen* is only found in Holland, Utrecht and the city of Breda, and furthermore once each in Antwerp and Mechelen. This variant is absent from Flanders and Zealand and from the southeastern dialects. Maybe *sellen* was formed by analogy with the sg. *sel*, found in the same area. The information given by van Loey 1976: 90–1 on the development in the fourteenth and fifteenth centuries is also relevant. In both Flanders and Brabant, forms with a long vowel in open syllable, viz. *su(e)len* in West Flanders, *selen* in East Flanders and West Brabant, *so(e)len* in East Brabant, are gradually being replaced by forms with a short vowel. Until the early fifteenth century, for instance, *selen* is the predominant form throughout Brabant (beside *soelen* in North Brabant) as against *soelen* and *suelen* in Limburg and *soelen* in north-eastern dialects; see CRM14 for additional attestations.

As to the unrounding, this yields the following scenario. The spread of front rounded vowels (/ø:/, /ö/) and their unrounded counterparts does not correspond geographically to what is normally found for *brug/brigge*, etc. Firstly, rounded and unrounded variants co-occur in several dialects to a larger extent than is usual. Secondly, unrounding is found further east than in other words. Thirdly, unrounding is spectacularly less frequent in West Flanders than in East Flanders, Brabant and Holland. This situation is nearly the reverse of the usual distribution of unrounded and rounded reflexes of \**ü*. All these facts suggest that there were at least two independent foci of unrounding in this verb. One area of innovation would have comprised at least Brabant and East Flanders, which unrounded the lengthened vowel /ö:/ to /e:/ in *selen*, *sel(e)t*. Another area, mainly limited to Holland and Utrecht, unrounded the short

rounded vowel of *sullen* to *sellen*, possibly under the influence of sg. *sel* from *sal*. Altogether, then, the unroundings in this verb may have been due to its use as an unstressed auxiliary.

23. *zult(e), zilt(e)* ‘brawn, headcheese; brine’ < \**sultjō-*<sup>120</sup> ‘salt water’ (OS *sulta*, MLG *sulte* ‘salt water, salt meat’, OHG *sulza* ‘salt walter’, MoHG *Sülze*).

The usual forms of the noun are ODu. *sulton* (DAT.SG.) ‘salty ground’, MDu. *sulte, sult* ‘salt meat’, MoDu. *zult*. Reinterpreted as an adjective, it occurs as *zult* ‘salty’ first in 1591, and is subsequently replaced by *zilt* (first in 1624, then from 1700 on). Unrounded forms appear in West Flemish from an early date: MDu. *silte* ‘salty food’ (Yperman, WFla., 1351), *zelte* ‘saliferous moor’ (WFla., 1510), *zilte* ‘saliferous ground, brine, saltiness’ (from 1560, western Dutch). Modern Zealandish has *zilte* ‘saltiness; eczema’, West Flemish *zilte, zelte* ‘nitric acid on walls; itch, scab’, which arose by metaphor from ‘salt crust’. In northern West Flanders *zilte* ‘brawn’ survives. The derived verb *zulten* ‘to pickle’ corresponds with Zealandish *zilten*.

### 15.2.2 Flemish unrounding before rC

A subcategory of forms which have been adduced as further evidence for old unrounding consists of seven<sup>121</sup> etyma with \**ür* before another consonant: *borstel* ‘brush’, *dorst* ‘thirst’, *horst* ‘elevation’, *mergen* ‘to enjoy’, *murw* ‘weak’, *storten* ‘to pour, shed’, *wortel* ‘root, carrot’. Five of them show medieval Flemish forms in <e>.

The modern dialects tend towards a reflex /oe/ of \**u* before rC in large parts of southern Dutch, which is mainly due to a recent fronting before rC. Taeldeman (1971: 210–34 and Map 10–3) has shown that the unconditioned fronting of \**u* to /ce/ was more widespread in Flanders before *r* plus dental obstruents than before *r* plus labials or velars. Unlike Taeldeman, I think that *i*-mutation factors were of no influence on the modern distribution; especially the relic area of *dorst* in French Flanders informs this view. But I do agree with Taeldeman that we must assume at least two different centres of unconditioned fronting before rC: one in Brabant and the other in West Flanders. The question then follows whether the sporadic medieval *e*-forms, which I will present below, arose before 1200. If they did, they

120. In contrast to Kroonen (2013: 491), I do not think that a separate PGm. ADJ. \**sult-ja-* ‘salty’ must be reconstructed. *Zilt* is mainly used for sea water, sweat, and tears, that is, for naturally salty liquids. The noun *zulte, zilte* was probably reinterpreted as an adjective in certain collocations, such as compounds (e.g., \**zilte-golven* ‘salt water waves’ → ‘salty waves’) or appositions (e.g., \**zilte, tranen* ‘saltiness, [that is] tears’ → ‘the salty tears’).

121. I did not carry out an exhaustive search.

may be interpreted as the only remnants of an Old Flemish unrounding of \*ü which was later superseded by forms with a rounded vowel. If, on the contrary, *derst* for 'thirst' and similar forms do not predate Early Middle Dutch, they probably represent early instances of the unrounding of the vowel /œ/ which arose throughout Flanders from unconditioned fronting of \*u.

1. *borstel* 'brush' represents WGm. \*burstila- (ME *bristel*, *bröstel*, *brestel*, MoE *bristle*), derived from WGm. \*bursti- (OHG *burst* f., OE *byrst* 'brush'), cf. EWAhd II: 471–2.

Early MDu. *burstel* 'bristly hair, quill' is only attested in the West Flemish plural *burstelen* (5x)<sup>122</sup> and the ADJ. *gheburstelt* 'bristly'; in this region, unconditioned fronting of \*u to /œ/ is regularly found before rC. All Late Middle Dutch and Modern Dutch forms have o or u. The modern dialects of North Brabant, Limburg and Groningen generally have a back vowel, see Map 20. Hence, the noun must be reconstructed without *i*-mutation factor for Dutch.<sup>123</sup> The fronting in Flanders, southern Brabant and in northeastern dialects must be more recent, cf. FAND I: 260 and Map 125.



Map 20. Front vowel reflexes in *borstel* (GTRP database)

<sup>122</sup>. The entry *berstel* in MNW must be disregarded: the passages quoted there have u in the oldest ms. D (see VMNW).

<sup>123</sup>. The absence of *i*-mutation before the suffix \*-ila- is unexpected: probably, *borstel* restored the unmutated back vowel from the simplex *borst*.

2. *dorst* ‘thirst’ continues PGm. \**þursti-* (OS *thurst*, OHG *durst*, *thurst*, MoWFri. *toarst*, InsNFri. *tast*, *sarst* [< \**thirst*], OE *thurst*, *ðyrst*, MoSwe. *törst*, Got. *þaurstei*), *dorsten* ‘to thirst’ goes back to \**þurstjan-* (OS *thurstian*, OE *ðyrstan*, ON *þyrsta*). Old Dutch has a DAT.SG. *thursti* (WPs.).

In Early Middle Dutch, *dorst* is the most common variant in Limburg, Brabant and East Flanders, but in West Flanders *durst* is more frequent. Unrounded *derst* is found in Van Maerlant’s *Rijmbijbel*, and *darst* next to *derst* in *Der Natueren Bloeme D.*<sup>124</sup> The verb *dorsten* is attested in the thirteenth century, viz. ten times with *o* in Brabant and Limburg and once with *u* in West Flanders. In Late Middle Dutch, *derst* remains a Flemish variant of *dorst*, found more frequently in the noun than in the verb. In modern dialects (see Taeldeman 1979: 60, *FAND* Map 124), fronting to /œ/ is found in Antwerp, South Brabant, East and West Flanders, but not in North Brabant, Limburg or French Flanders. The lack of fronting in Limburg and North Brabant shows that in those dialects, *i*-mutation did not apply. The back vowel in French Flanders confirms the suspicion that Flemish /œ/ where we have it is due to unconditioned fronting of \**u*.

3. The toponym MoDu. *horst* ‘elevation’ is never certainly attested with *i*-mutation. We find *horst*, *hurst* in Old Dutch toponyms, the only exception being *in Bochursti* (806 copy 10th c.); and MDu. *horst*, *hoerst*, *hurst*. *EWN* gives as competing reconstructions \**hursti-* and \**hursta-*. The *i*-stem is probably informed by OE *hyrst* next to *hurst*, but OS *horst* and MoHG *Horst* show no trace of *i*-mutation. The Early Middle Flemish toponym *he(e)rst* refers to a sandy region in the north of East Flanders, near Boekhoute. It is possible that this form represents an unrounded variant of unattested \**hürst* < \**hursti-*, but the absence of other traces in Dutch and German renders this uncertain. Alternatively, we are dealing with an ablaut variant with WGm. \**e* or \**a*. Compare the word *harst(e)*, *herst(e)* ‘roast’, particularly from the ribs (OHG *harst*). For a ‘sandy ridge’ as is *De Heerst*, this would be an acceptable metaphorical explanation. Gysseling (1966c: 151) also mentions two toponyms *Herst* from Calais (1282, 1298).
4. *mergen* ‘to enjoy oneself, to relax’. This verb and its derivatives (perfective *vermergen*; *merchte* ‘mirth’, *mergelijc* ‘merry’) are only attested in Middle Dutch. Probably, an ADJ. \**merge* formed the basis of the Dutch word family. Cognates of putative \**merge* only occur in English, viz. OE *myri(g)e*, MoE *merry* < ADJ. \**murgja-*, OE *myrgan*, noun *mirth* < \**murgibō-*. These may be derived from PGm. \**murgu-* ‘short’, although the semantics are unclear (Heidermanns 1993: 416). Formally, the replacement of an *u*-stem adjective by a *ja*-stem has parallels in Germanic, cf. WGm. \**punnja-* << \**punnu-* ‘thin’. The few thirteenth-century forms are all from West Flanders and all have *e*. In Late Middle Dutch, (*ver*)*mergen*

<sup>124</sup>. The *a* arose from West Flemish lowering of *erC* to *arC*, see van Loey 1980: 9, Berteloot 1984a, Map 21.

is also predominantly found in Flemish literary texts. Furthermore, we once find *vermagen* in the Lancelot Romance, and a few times *vermorgen* with rounded vowel in literary texts from Holland. The word is not attested after 1500.

These data agree well with an Old Dutch stem form \**murg-* which was fronted and unrounded in Flemish, but not in Holland or in the interior dialects.

5. *murw* ‘weak, bland’ < \**muruwa-* beside *merw* < \**marwa-*. West Flemish has a rounded vowel in the thirteenth century in the surname *moref*, *muerf*, but unrounded *e* in *meru ey* ‘a raw egg’. Literary texts from East Brabant have *morwe*, *morf*, and the Limburgian Glossarium Bernense (1240) has *merue* but *moruleke* ‘weakly’. A few Late Middle Dutch texts also have *meru*. Most texts in most dialects until 1600 have *moru*, *morwe*, whereas *murwe* first appears in 1530 (WNT s.v. *pingel* II). Modern West Flemish also has a variant *merf* (de Bo 1892: 600). The *e*-forms could continue \**marwa-* with raising of *a* before *rw* (as in *verwe*, MoDu. *verf* ‘paint’ < \**farwa-*), or they could reflect unrounding. As the *e*-vocalism is also found in Limburg, it cannot be due to a coastal Dutch development. Maybe the vowel \**ii* was unrounded between the surrounding labials *m\_w* (cf. \**wünsken* > *wensen* ‘to wish’)?
6. *storten* < \**sturtjan-* ‘to shed, throw, fall’ (OHG *sturzen*, MoHG *stürzen*, MLG *storten*, OFri. *stirta*). The Early Middle Dutch forms have <*o*> or <*u*> in all southern dialects, with a marked preference for <*u*> in West Flanders in the thirteenth century. In Late Middle Dutch, *storten* is the usual form, also in Holland. A few cases of *sterten* occur in Middle Dutch: *Dat hi doot ter erde sterte* (*Grimbergsche Oorlog*), and *sterten* in an account from Aardenburg (North Flanders). No unrounded forms were found in Modern Dutch.
7. *wortel*, *wertel* ‘root’ < PGm. \**wurti-walu-* ‘root-stick’ (MLG *wortele*, OHG *wurzala*, OFri. *wirtel*, *wortel*, MoWF *woartel*, *wurtel*, OE *wyrtwalu*, *wyrtwala*); the simplex is MDu. *wort*, *worte* ‘root, herb’ < \**wurti-* (Goth. *waurts*, OS *wurt*, OHG *wurt*, MoHG *Wurz*, OE *wyrt*) resp. \**wurtjō-* (OS *wurtia*, MoHG *Würze*).

In the simplex \**wurti-*, absence of *i*-mutation is expected in the endingless forms of the singular, and the back vowel has apparently been generalized in Middle Dutch. In Old Dutch, however, the Leiden Willeram has *salfwerz* ‘herbal ointment’ for *salbwurz* of the High German model. Since other instances of \**wurti-* further on in the manuscript have the High German form -*uurz* ‘herb, plant’ (NOM.PL. *arzatwurze*, PL. *stankwurze*), Sanders 1974: 248 thinks that *salfwerz* is a possible instance of the Egmond scribe’s own dialect. This would then be either Old Frisian (with unrounding as in OFri. *wirtel*) or coastal Dutch, with the same unrounding brought about by the language contact process with Franconian. Yet in view of the High German affricate -*z* / -*ts*/, *salfwerz* would at the most be a hybrid form. The other Old Dutch attestations (WPs. PL. *Uurti*, -*e*, and the toponym *Wurtelam*, *Wortel* in the province of Antwerp < \**wurti-lauxa-*) do not inform us about *i*-mutation. The noun is attested in Early MDu. NOM.SG.

*sanwort*, ACC.PL. *worte* (Cleves/Guelders, 1250), the stem \**wurtjō-* in *schelworte* ‘greater celandine, *chelidonium maius*’ (WFla., 1226–50).

The compound \**wurti-walu-* is usually reflected by Early MDu. *wortele* f. or *wortel* m., but this is only attested in literary texts. The vowels *u* and *e* are both once attested in West Flemish. In the fourteenth century, documents from Ypres yield the compound *wertelvast* ‘rooted’ (1329, also 1361, 1363, 1388–89).<sup>125</sup> For modern dialects, see FAND Map 126. Fronted /œ/ is found in the provinces of Antwerp, South Brabant, and in parts of East Flanders, but hardly in the northeastern dialects. Furthermore, /œ/ features in some places of French Flanders, and unrounded /æ/ in Poperinge and Nieuwkerke in West Flanders. For ‘root (of a tree)’, WVD has traces of unrounding from West Flanders (*wertel*, *wettel* de Bo 1892, *wettel* Poperinge, *wirtel* Ghent), whereas *weuttel* ‘carrots’ is given as a frequent plural in West and East Flanders.

### Interpretation

The noun *dorst* shows that unrounding to *e* can occur in Flemish in a word which certainly did not have an *i*-mutated stressed vowel in the Old Dutch period, even if the West Germanic preform was an *i*-stem. *Derst* must therefore represent unrounding of the vowel /œ/ which arose from unconditioned fronting of \**u* in Flemish. The same explanation must therefore be allowed for *stertern* and *wertel*, although an *i*-mutated vowel cannot be excluded for certain. For *wertel*, as for *merf* and *mergen*, unrounding is nearly in all cases restricted to Flanders, it is of a relatively sporadic nature, and it may have been caused by labial dissimilation after *w-* and *m-*. Only LW *salfwerz* might be an older, Hollandish case of unrounding, but its status is difficult to judge because of High German *-z*. Finally, unrounded *berstel* does not exist and *herst* may have a different etymology.

#### 15.2.3 Unrounding in open syllable

Earlier collections of forms with unrounding of ODu. \**ii* in open syllable can be found in Franck 1910: 43, van Loey 1980: 44–5 (for Middle Dutch), Weijnen 1963, Schönfeld & van Loey 1970: 50, ANKO I: 45–6, van Bree 2016: 254. The evidence appears in alphabetical order of the Modern Dutch entries.

1. *deuvel* ‘dowel’ < \**dubila-* (MLG *dövel* ‘peg, nail’, OHG *tubili*, MoHG *Dübel*, *Döbel*, ME *dowel*).

Early MoDu. *duevel*, *deuvel*, also *doordeuvelet* ‘pierced with dowels’. A West Flemish variant is *deugel* (WVD). Unrounding is attested in Early MoDu. *deur-develt* ‘pierced with dowels’ (1584, North Holland; WNT s.v. *doordeuvelet*),

<sup>125</sup> Jacobs 1911: 147; *Compilatiecorpus Historisch Nederlands 1.0* ([www.diachronie.nl](http://www.diachronie.nl)).

and in modern dialects: *degel* (Beernem, WFla.), *devel* (Ekelsbeke, FFla.). Since this unrounding is only sporadically attested, we cannot be sure that it goes back to the Old Dutch period.

2. *deuvik* 'plug in the vent of a barrel, dowel' < \**dubika-* (MLG *dovicke*, MoWFri. *douk*).

The oldest attestation ACC.PL. *doeveke*, probably /dø:vəkə/ (Brussels, 1365) was unearthed by van Loey (1951).<sup>126</sup> The word is more frequently attested after 1600 (WNT). Usually it has the form *deuvi(c)k* or *duevick*, also in Hollandish farces, but unrounded forms are sporadically found. WNT mentions *devick* in Pieter van Godewijck's play *Wittebroods-kinderen of Bedorve Jongelingen* (Dordrecht, 1641). *Devick* also occurs in the farce *van een boer die in een calfsvel benaeyt was* 'About a farmer who was sown into a calf's skin', printed in Amsterdam ca. 1615. A compound *devic-lecker* 'who licks the dowel (of a barrel)' is used of an alcoholic in an anonymous poem called *Van den abt van Amfra*, printed in Antwerp in 1647 but going back to ca. 1600. Its dialect cannot be exactly determined but is western Dutch. Samuel Ampzing's *Taelbericht* from 1628 has *scheeps-devick* for 'rowlock'; Ampzing was born and died in Haarlem. In 1836, Hoeufft mentions *devik* as a dialect word for 'rowlock' in Breda, but Cornelissen & Vervliet (1899–1906) give *deuvik* for the dialect of Antwerp. Hence, it is conceivable that unrounded *devik* spread as a technical term mainly in northwestern Dutch.

3. MDu. *evele* and *ovele*, MoDu. *euvel* 'bad, evil' < \**ubila-* (OS *uvil*, OHG *ubil*, ODu. *uuel*, MoHG *übel*, OFri. *evel*, OE *yfel*, Goth. *ubils*).

In Early Middle Dutch, unrounded *evel* occurs in Flanders, West Brabant, Zealand, and Holland, as against rounded *ovel* /ø.vel/ in East Brabant and in the southeast, and *oevel* in the fourteenth century in Drente (also with front vowel, cf. *euvel* in modern dialects of Groningen and Drente).<sup>127</sup> *Evel* is the literary standard form in Late Middle Dutch, and Kiliaan, too, treats *evel* as the unmarked form. All Hollandish authors of the seventeenth century also use *evel*, but *euvel* became the written norm. Its *eu* could be due to recent rounding of earlier *evel*, since rounding of lengthened *e* before *v* is often found in Dutch, e.g. in *zeven* 'seven'. In the sixteenth and seventeenth centuries, the competing spelling *oevel* for /ø:vel/ or /u:vel/ is sometimes found, e.g. in Kiliaan's dictionary (who refers to *evel*) and in Hollandish literature (e.g. Bredero, Hooft).

<sup>126</sup>. According to Claes (1974: 186), Kiliaan got his form *doeuick* from the 1594 Low German *Nomenclator Latino-Saxonicus* by Chytraeus, which is also mentioned as the only source for the Middle Low German word by Schiller & Lübben 1875–81. It follows that the spelling *dovicke* in Schiller & Lübben is regularized, and that Kiliaan's word must not be counted for Dutch.

<sup>127</sup>. As shown by the charters edited on www.cartago.nl. Northeastern Late MDu. *oevelgang* 'transfer of property to the legitimate heir, in exchange for life-long care' must be based on a conscious translation of Old Frisian *evelgung*, whereby *evel-* was replaced by *ovel-* (Löfstedt 1963–65: 327).

EWN interprets *oevel* as a hypercorrect form of Hollandish which represents a reaction to the perceived low-register quality of the *eu* in *euvel*. This is *ad hoc*, but I do not see a better alternative.

4. MDu. *hepe*, MoDu. *heup* 'hip' < \**xupi-* (MLG *hüp*, OHG *huf*, OE *hype*, Goth. *hups*). Unrounded *hepe* is attested in Melis Stoke's rhyming chronicle of Holland and in a manuscript of Yperman's *Cyrurgie* (1365–85, WFla.). Other Middle Dutch forms are *hoep* /hø.p/ 'backbone' (Limburg, 1240), and *hope*, *heupe* (in Flanders). Kiliaan has *heupe*, Modern Zealandish *eupe* (WZD). In western Flemish, unrounded (*h*)epe still occurs, though WVD does not tell us exactly where it is used.
5. *heuvel* 'hill' < \**xubila-* (MLG *hovel*, OHG *hubil*, MHG *hübel*) is never found with (old) unrounding in modern dialects. Variants are *hovel* and *huffel*. One unrounded instance occurs in Middle Dutch in Van Maerlant's *Troyen*: *Hy viel daer aen een hevele* 'He fell there at a hill', where *hevele* translates Old French *moncel*. The word is not ascertained by the rhyme, however, as the preceding line ends in *vele* 'many', which cannot normally rhyme with *hevele*.
6. *keuken* 'kitchen' < \**kukinō-*. An unrounded variant is attested in a document from Ghent (1376): *vort zullen zij behouden de kekene ende eene scaperade* 'further they will keep the kitchen and one cupboard' (CRM14). In a very similar formulation from a year later, 1377, we read *de kokene ende eene scaperade*.
7. *knekel* 'bone (of a skeleton)', *verkneukelen* 'to gloat over' < \**knukila-* 'little bone' (MLG *knökel*, MoHG *knöchel*, ME *knokel*, ON *knykill*).

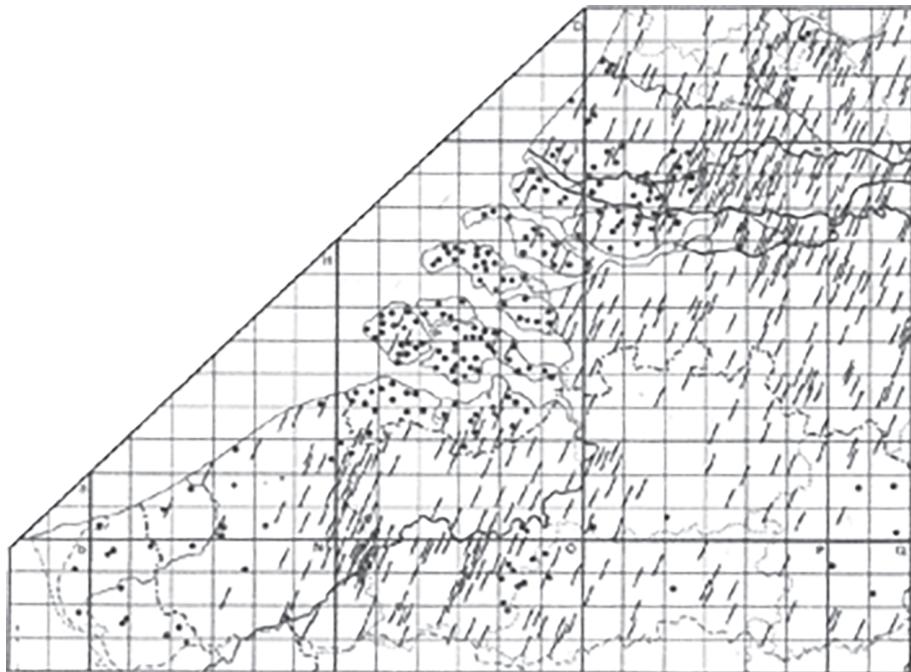
The noun is attested without *i*-mutation as *knokel*, with *i*-mutation as *kneukel*, and with unrounding as *knekel*. The oldest attested form is MDu. *cnokel* 'joint, knuckle' (*knoyckel* in *Teuthonista*, *knokel* in the Prose Reynaert, 1479). Kiliaan (1599) has *knokel*, also meaning 'vertebra'. Note that the *o*-vocalism may in theory be analogical after *knook* 'bone' (< \**knuka-*). MoDu. *kneukel* 'knuckle; bone in one's finger' is not infrequent in Early Modern Dutch literature from Flanders, Zealand and Holland, the earliest attestation being the plural *cnueckelen* in Everaert (1538) from Bruges. By extension, *kneukel* can also mean 'lout', thus still in Schuermans 1865. Unrounded *knekel* first appears in western Dutch in compounds such as *knekelyat* 'ossuary' (Tengnagel, 1640) and *knekelyhuys* 'charnel house' (Sprankhuisen, 1647). Thus, it is possible that *knekel* is an unrounded form of *kneukel* which was restricted to colloquial registers.

8. *krepel*, MoDu. *kreupel* 'lame, crippled' < \**krupila-* (OS *krupel* 'contracted', MLG *kropel*, *krepel* 'lame', MHG *krüpel*, *krüppel*, OFri. *kreppel* 'a cripple', OE *crypel*, *crepel*, ON *krypill*).

The oldest attested form is the toponym *Crepelfliet* (1101–1200 copy ca. 1420) from North Holland, near Schoorl. In Early Middle Dutch, the Bruges documents have seven times *crepel*, while Van Maerlant's Rhyming Bible has *creupel*. In the city of Mechelen, *cropel* (4x) occurs as a surname alternating

with *creupel* and *crupel* (both once); hence, it was probably pronounced as /krø̞.pel/. *Crepel* remains in Middle Dutch Flemish texts, and *vercrepelt* ‘crippled’ is found, e.g., in a text from Gouda (1480). The spelling *cropel* also occurs, and it cannot always be determined whether it renders /o/ or /ø/; but <oo> in *croopel* (Brabant, 1401–50) is probably a back vowel. The spellings <eu> and <ue> are strikingly rare in Late Middle Dutch. Kiliaan regards *krepel* as a Flemish, Hollandish and Frisian form of *kreupel*, but s.v. *kreupel* he refers to *kropel*, which he seems to have preferred. Thus, for Middle Dutch we may regard *krepel* as native to the coastal provinces, and *kreupel* as a Brabantish form which occurred next to *kropel*.

Map 21 reproduces map V from ANKO, vol. I, which represents the modern dialect forms of ‘cripple’. The slashes indicate a rounded vowel in *kreupel*, *kruppel*, whereas the dots represent unrounded *krepel*, *kreppel*, etc. Western Flanders, Zealand and South Holland quite consistently have unrounding, and the Vecht area north of Utrecht also displays a rather high number of unrounded forms. The unrounding instances on the East Flemish-Brabantish border and in Limburg belong to productively unrounding dialects. Together with the Middle Dutch evidence, this firmly establishes *krepel* as a coastal Dutch form, against *kreupel* in the interior. No *o*-forms are found: unlike what we observe in *molen* or *koning*, the *o*-variants seem to have been replaced by *eu* in Modern Dutch.



Map 21. *kreupel* in modern dialects (from ANKO I, map V)

9. *meuzie, mezie* ‘midge’ < \**musjō-*. The word is restricted to southern and western dialects. A rounded vowel appears in MDu. *moesie* (West Limburg, 1291–1300), plur. *muesien* (WFla., 1285, 1287), unrounding in West Flemish *messien* (*Rhyming Bible*, 1285). Probably, a stressed vowel /ø:/ is rendered in Late MDu. *mosiën* (Ruusbroeck), *meusiën* (Holland, 1477), *mosie* (*Voc.Cop.*), and in Early MoDu. *meuziën* (Ghent, 1566), *meusie, mosie* ‘midge’ (Kiliaan, 1599). Van Ginneken et al. (1938: 336) show that *me(u)zie* occurs in modern dialects in the southern half of East Flanders and in adjacent parts of eastern West Flanders and southwestern Brabant. Most dialects appear to have *eu*, with unrounded *mees* in western South Brabant, and *mezie* in West Flanders. With an additional suffix, *meuzik* appears here and there in the northwest of North Brabant, and unrounded *mêēzik, miezik* ‘thrips’ on Goeree-Overflakkee (*WZD*). De Bo has *meuze* next to *meze* (but from which localities?). Thus, the only certainly old unrounded form is *messien* in the *Rhyming Bible*, with a short vowel in a closed syllable.
10. *peluw* ‘bolster, pillow’ < Lat. *pulvīnus* (OS *pulwi*, OHG *pfuliwi* n., *pfulwo* m., MoHG *Pfühl*, OE *pyle*, MoWF *pel*).

An early, unrounded form is *pelu* in a Flemish charter from 1163. In the thirteenth century, West Flanders has unrounded *pelew* as a surname, Ghent has rounding in the verb form *peulwet* ‘provides with a pillow’, and Limburg has *pulwe* and *pulewe*. The later Middle Dutch texts have either a form with *w*-suffix, such as *poluw, peluw*, or without it, such as *poele, peul*. The vowel spellings (*pool-, poel-, puel-*) do not bring certainty about the pronunciation; in particular, *pol(u)w-* may reflect /o:/ or /ø:/. Kiliaan (1599) has *hooftpoluwe* ‘head pillow’ with /o/, but we also find the variants *pulwe, peluwe, puluwe, pole, polue*. This shows that *o*-vocalism was linguistically real at least in Brabant. *Peulen* and *peuluwen* occur in Holland in the seventeenth century, and *peul(e)* remains in modern Hollandish dialects. Unrounded *peluw* only appears as a literary form in the nineteenth century. The compound *windpeluw* refers to a heavy beam under the roof of a windmill. According to *WNT* it can be found as *-peuluw* and *-peuling* in North Holland, *peul(e)* in Groningen, Zealand and South Holland, and *-pulm* in southern Dutch (also *pulf*). Dialectally, *-peluw* features in western Zeeuws Vlaanderen (*WNT* s.v. *molenaar*, p. 56) and on Overflakkee in *hōotpeele* ‘head pillow’ (Landheer 1951: 18).

11. *Rupelmonde* (1171 *Rupelmundam*, 1187 *Rupelmunda*, 13th c. *Rupelmonde*), a town in East Flanders, southwest of Antwerp, is sometimes found with unrounding, viz. in *Ripelmunda* (1187, French charter), *Ripelmonde* and *Repelmonde* (1340, no source; Gysseling 1960a), *broeder Willems van Replemonde* (1359), *Wilhelmus de Repelmonde* (1360), *Guilielmus de Replemonde* (1364). Other sources of the fifteenth and sixteenth century equally write *Repelmonde*, but also *Reppelmonde*,

*Ripplemonde*, *Ripelmonde* (14th-15th c.), *Rypelmonde* and *Rijpermonde* (17th c.). The town is now pronounced as [rəpəlmɔnt] (Debrabandere et al. 2010: 218), which shows that the spellings with <ij, y> are secondary and do not reflect the local pronunciation (Roelandts 1950: 169). Roelandts also shows that the river itself was usually called *Rupene* from the twelfth to the fourteenth century, and subsequently appears as *Ruijpel* (1477), *Ruijpe* (1531), *Ruype* (1561), *Ruepele* (ca. 1571) in texts from Brussels. A nearby polder is called *Rupenbroc* in the thirteenth and fourteenth century, also *Ruperbroc* and *Rupembroc*, and regularly *Ruypenbroek* in the seventeenth century.

These data point to an original long vowel in \*Rūp-. The *l*-suffix can be explained in two ways: either there were two Old Dutch variants of the name, viz. \*Rūpene and \*Rūpele, or \*Rūpen-mundō dissimilated to \*Rūpel-. The long vowel of \*Rūp- was sometimes shortened before the cluster *-pl-*, and both variants could be unrounded.

12. MDu. *resel*, *ruesel*, MoDu. *reuzel* ‘lard’ < \*rusila- (OS *rusal*, *rusli* ‘fat’, OE *rysel*, MoWF *riezel*, *rizel*).

The earliest attestations are *ruesel* (Holland, 1461) and PL. *resels* (Holland, 1465–85), *roesel* (*Teuthonista*, 1477). Kiliaan s.v. *rosel*, *reusel* refers to *russel*, which he glosses as ‘fat of an animal’, together with the variant *ruetsel*. *Reus/zel* is nearly the only form in the seventeenth-century literature from Holland and further east. The dictionary of Katwijk (Overdiep 1949) has “*rezel* of *reuzel*” for certain fish entrails. Weijnen 1963 mentions *reezel* for Katwijk (from the dialect enquiry by Te Winkel in 1895), Rijnsburg and Texel, and *riezel* for Terschelling. In the twentieth century, *WZD* has no unrounded forms anymore. For Assendelft in North Holland, Boekenoogen 2004 gives *rezel*.

13. MDu. *snedel*, *sno(e)del* ‘mean’ < \*snudila- or \*snaudila- (cf. MHG *besnoten* ‘tight, meagre’, ON *snoðinn* ‘bald’, OE *be-snyððan* ‘to bereave’ with \*u; MDu. *snode* ‘bad, poorly’, MHG *snøde* ‘id.’, ON *snauðr* ‘poor, bereft’ with \*au).

Early MDu. *snoedel* ‘foolish’ (EBrab., 1276–1300), Late MDu. *snodel*, *snuedel* ‘poor wretch, fool’. Possibly, the adjective is part of the toponym *snodelwiic* = (*van*) *snedelwike* in South Holland (thirteenth century). Dirc Potter (SHol., ca. 1470–90) has two clearly unrounded instances of *snedel* ‘foolish’, both rhyming with *edel* ‘noble’. In modern dialects, a form *snoedel* ‘simpleton, soul’ is mentioned for the town of St. Truiden in the nineteenth century. Schuermans (1865) has *sneul* ‘wick of a candle as it falls down by the side of a candle’, also called *dief* ‘thief’; this may be the same word in origin.

14. *veulen*, *volen* ‘foal’ < WGm. \*fulīna- (OS *fulīn*, MLG *völlen*, OHG *fulin*, MoHG *Füllen*), beside the variant \*fulan- (MDu. *vole*, Hol. *vool*, OFri. *fola*, MoWFri. *fôle*, E *foal*).

The usually Middle Dutch forms are *voelen*, *volijn*, *volen*. Unrounding is attested in MDu. *velene* ‘foals’ (*Reis van Jan van Mandeville*, fol. 128ra., Holl. 1462). The diminutive appears in Early Middle Dutch in unrounded form as *velken* (NOM.PL.) in Bruges in 1300 versus the rounded vowel in the surnames *volekin* (Ghent, 1292) and *vollekijn* (Breda, 1291). The attestation *veelken* from 1534 (WNT s.v. *Veulen*) is of uncertain origin and cannot be used. The unrounded instances in southern Dutch on Map 1.5 of TNZN all belong to productively unrounding dialects.

15. MDu. *volik*, *velik* ‘foal’ < \**fulika-* (OHG *fulihha*, MHG *vülhef*). The Middle Dutch words mostly indicate a male foal, whereas the German ones refer to a female. Originally, the word must have referred to both genders. The suffix appears als -*ik* and -*ing*. MNW provides the following, western attestations: *voolin* (*Die Rose* by Hein van Aken, Brabant), *van een grisen volike* ‘of a grey foal’ (Holland, 1345), *volke* (DAT.SG.; Nispen, NWBrab., 1421), *vulc* (Holland, 1444). Unrounded variants occur in the same Hollandish accounts between 1343 and 1346 in which *volike* is used, viz. *van een zwarte velike* and *van een zwart vale velike*, *van een roden velic volen*. With a short vowel before *lk*, unrounded *vilke* (NOM.) is attested in an account from Zealand from the fourteenth century (MNW). In Merula’s *Wildernissen* (1605, Holland), we find *vilck*. De Bo (1892) has *vilke*, *vulke* in particular for a ‘female foal’, which he locates particularly in Veurne-Ambacht (southern West Flanders). In subsequent dialect enquiries, the word does not show up anymore in Flemish. The distribution of the variants may be explained from different developments in masculine \**fulika-* and feminine \**fulikō-*, with syncope in the latter but not in the former. If that is correct, Early MDu. m. \**vülik* beside f. \**vülke* would have developed into rounded *volik* beside *volke*, *vulke*, or, with unrounding, *velik* beside *vilke*.
16. *vleugel*, *vlogel*, *vlegel* ‘wing’ < WGm. \**flugila-* (MLG *vlögel*, MHG *vlügel*, MoHG *Flügel*). The unrounding is not frequent but sufficiently attested: *an beyden zijden van den wangen of vlegelen van der brugge* ‘on both sides of the cheeks or wings of the bridge’ (Leiden, 1450–1500), *aen de vleghele van der poorten* ‘on the wings of the gate’ (Antwerp, 1404), *vleugel ofte vlegel* ‘wing’ (Plantin, 1573), *vleghel* ‘wing’ (Smijters, *Epitheta*, 1620); see MNW and WNT. The verb *vleugelen* is quite frequent in Early Modern Dutch in the meaning ‘to fetter, tie the hands behind the back’. It occurs with unrounding in *ghevleghelt* in *Spel van Sinnen op dwerck der Apostelen* (1592). The spellings <o> and <oe> are ambiguous in Middle Dutch, but a back vowel <o(o)> is often found in literature of the sixteenth and seventeenth centuries, e.g., Plantin *vleugel oft vlogel* ‘vleugel or vlogel’ (1573), *vloghelen* but also *vlueghelen* ‘wings’ (Deux Aes Bible, 1562), Vondel (*passim*), and others. In modern dialects, East Flanders has *vleugel* (and dissimilated *vleuger*, WVD). Brabant and Limburg generally have an *i*-mutated vowel.

### 15.2.4 Alleged evidence to be dismissed

1. *homp* ‘lump, small height’ < WGm. \*xumpa-. This word was taken into consideration by Schönfeld & van Loey (1970: 51) because of the place name *Impe* in East Flanders (near Aalst), spelled *Himpe* in 1123. Yet the name is now explained as having a suffix \*-apa ‘water’, see ONW. Also, besides *Himpe* in 1123 there are seven other attestations between 1108 and 1222 without *h*: *Impa*, *Impes* (TW, digital edition). It is true that Modern Westerlauwers Frisian has a variant *himpe* beside *hompe* for ‘hump’, but there are no other Dutch forms which point to an *i*-mutation factor.
2. *Keulen* ‘Cologne’ (< \*Kolonia) is usually Early MDu. *Colne* (Limburg, Holland, West Flanders) and once *Coelna* (WBrab., 1292). An apparently unrounded instance *Kelne* appears in a document from Bruges (1285) which mentions a certain *Peter van kelne*. Of course, it cannot be regarded as certain that *kelne* indeed refers to the city of Cologne.
3. *knuppel, knippel* ‘cudgel’; *cluppel, clippel, cleppel* ‘cudgel, stick’, from \*kluppila- and possibly \*klapila-. MDu. *cluppel, cloppel* ‘cudgel’ (first attested in 1315–35; MNW) was derived from the verb *kloppen* ‘to knock’, and can be compared with MHG *klüpfel, klopfel* ‘clapper, cudgel’, MLG *kluppel*. Dissimilation of the first *l* led to modern *knuppel*, first attested in 1607.<sup>128</sup> Verstegen (1943: 301 + Map 2) has shown that unrounded forms of the shape *kli/eppel, kni/eppel, kli/epper*, etc., are found in modern dialects in all of Flanders and Zealand, in most of South Brabant and in (northern) parts of the province of Antwerp. Heeroma (1935: 35–72) found that *kneppel* was also widespread in South and North Holland. See also *FAND* I, Map 114.

The counterparts of *cluppel* with *i* and *e* are also attested from the early fourteenth century: *clippel* (from 1303), *cleppel* (from 1324, MNW). Whether they arose by unrounding in *cluppel* remains uncertain. The main objection to this solution is that *clippel* is not only attested in western dialects but also in eastern Brabant. *Clippel* and *cleppel* may alternatively belong to *klepel* ‘clapper’ (of a clock), with introduction of *pp* from the verb *clappen* ‘to clap’. From *cli/eppel*, the nouns *kneppel* (1470–90; MNW) and *knippel* (1481; MNW) ‘cudgel’ may have been derived by means of the same dissimilation which is responsible for *knuppel*. The later date of attestation of *kne/ippel* would support this hypothesis.

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<sup>128</sup> The same dissimilation may have happened independently in Old West Frisian and MoWF *kneppel* ‘cudgel’ to the verb *kleppa* ‘to resound’.

4. *luttel, littel, lettel* ‘small, little’, < WGm. \**luttīla-*, \**lūtīla-*, \**lītīla-*. With different suffixes: *luttik, letter*. Cognates include OS *lut*, OHG *luzzi*, OE *lyt* ‘little’ < \**luttja-*; OS *luttīl*, OHG *luzzīl* < \**luttīla-*; OS *luttik*, OFri. *lutik*, OHG *luzzīg* < \**luttīka-*; OE *lýtel* < \**lūtīla-*; OFri. *litik*, MoWF *lyts*, ON *lítill*, Got. *leitils* < \**lít-* (Kroonen 2013: 339, EWAhd V: 1407).

Old Dutch *luttel* as an appellative is only attested in texts with a German background, viz. the Leiden Willeram and the Middle Franconian Rhyming Bible. Here, the word has a dental affricate /-ts-/ in all cases. In toponyms, the adjective appears as *litlon-* in *Litlongest* ‘Luttelgeest’ (SHol., 918–948 copy 11th c.) and as *lettel-* in *Lettelhouthem* ‘Letterhoutem’ (EFla., 1187). Berteloot 1984a, Map 54, provides a geographic survey of the vowel variation in the thirteenth century. The spelling <u> appears in Limburg and East and Central Brabant (including Antwerp), in East Holland, and in a few East and West Flemish documents. *Lettel* occurs in all of Flanders and South Brabant and in most of Zealand. *Littel* is only attested three times, once in Holland, once in Biezelinge on South Beveland (Zealand), and once in Aardenburg (northern Flanders).<sup>129</sup> Mooijaart (1992: 105) gives two reasons why the vowel distribution suggests that these forms do not reflect \**ü*: 1. The unrounding area includes South Brabant; 2. The unrounded vowel is *e* in Zealand and Flanders in a majority of cases, whereas those regions have *i* in words such as *brigge* ‘bridge’, *pit* ‘pit’ and *rik* ‘back’.

The Late Middle Dutch situation is not completely clear. *Lettel* and *luttel* are the main variants, but *litel* and *littel* are also found in a number of texts, as is *letter*. In CRM14, *littel* appears in Zealand in Sint Laurens (1348) and Middelburg (1363), and in Hoorn in North Holland (1396). In modern dialects, West Flemish *lijter* ‘little’ and *een lijte* ‘a little’ (de Bo 1892: 560) point to \**lít-*.

The West Germanic variant \**luttīka-* is first attested in the Wachtendonck Psalter: NOM.PL. *luctīka* (\**luttīka*), GEN.PL. *luttīcoro*, DAT.PL. *luttīcon*. In two twelfth-century toponyms from Gelderland, *Luttiken* appears as an adjective. In North Holland, the village *Luttickoisthusen* (1292), literally ‘Little-East-Houses’, is the only Early Middle Dutch attestation of *luttik*. In Late Middle Dutch and Early Modern Dutch, *luttik* is the usual northern Dutch counterpart of southern *luttel, lettel*, in particular in northeastern dialects and in North Holland. The diminutive *luttekin* has become *lutke* and then *lutje* by palatalization in *tk*, see WNT s.v. *lutje*. Unrounding is found in *Littekensant* (Egmond, 1304), *Litticke Uythorne* (Uitgeest, 1353), and *Littikenmade* (Castricum, 1396). In

<sup>129</sup>. The sporadic variants *letter* (Gentbrugge, Sint-Pieters-Leeuw), *nettel* (Ninove) and *lutter* (Mechelen) are probably due to *l*-dissimilation.

South Holland, *luttik* and *luttel* seem both to have been in use, compare the hydronym *Lutteke Rijn* at Koudekerke, east of Leiden. No unrounded forms appear in the northern dialects. Since *luttik* was also the normal form of the adjective in Frisian, this may have supported the survival of *luttik* in North Holland (cf. Boekenoogen 2004: 312).

If southern *lettel* does not contain unrounded \**ü*, chances are that the occasional variant *littel* does not either, and both contain WGm. \**i*. Since some Flemish variants require a preform \**lit-*, the existence of \**littila-* would be unsurprising. In the same way that \**lutt-* must ultimately go back to a stem \**lüt-* (cf. EWN and previous dictionaries), \**litt-* will go back to \**lit-*. Taeldeman (1979: 57) points to a number of words in WGm. \**i* which have a reflex *e* in most Flemish dialects, such as *smid*, *distel*, *blind*, *likken*, *timmeren*, and others. The pair *littel* > *lettel* could well belong to this group of words.

5. *Mel-* ‘mill’? Pijnenburg (1989: 154) adduces the forms *melnare* and *mellen* from a 1293 Calais document as evidence for unrounding in \**mulin-* ‘mill’ and \**mulinärja-* ‘miller’. Yet VMNW interprets these words differently as *melnare* ‘who mends’ and a verb *mellen* ‘to mend’.
6. Flemish *nese* ‘nose’ can be interpreted as a reflex of \**nasi*. Standard Dutch has *neus*, and since most eastern and northeastern dialects also have /ø:/, it seems most likely that *neus* reflects \**nusi-*. The exact preforms of ‘nose’ in Dutch are difficult to establish. On the one hand, most Germanic languages point to PGm. \**nasō-* and \**nusō-* (Kroonen 2013: 383). The former is reflected in Early Middle Dutch *nase* in Limburg and once in West Flanders (*Der Natueren Bloeme D*). Furthermore we find Early MDu. *nese* in East Brabant, Ghent and West Flanders, and *nose*, *noese*, *noyse*, *noose* in Antwerp and Bruges. The latter form was probably pronounced as /nø:ze/, since Bruges also once has *nues*; but we cannot be sure: it may also have been /no:ze/. Western Dutch *eu* and *oo* can both go back to either \**nusi* or \**nusō*. Flemish *nese* could be due to unrounding of /ø:/, but *nese* in East Brabant can only represent \**nasi*. Therefore, it seems safer to assume the same preform \**nasi* for Flemish *nese*. The assumption of old dual forms \**nasi* and \**nusi* (as per EWN) would suffice to explain Dutch *nese* and *neuze*, but the absence of *i*-mutation elsewhere in Germanic calls for caution. Possibly, the inherited root noun (PGm. \**nōs-*, \**nas-*) was remade into a *u*-stem (instead of an *ō*-stem) in Old Franconian, which was then remade into an *i*-stem in some Dutch dialects. Alternatively, the ending \**i* was adopted from the word for ‘nostrils’, PGm. \**nustri*, which probably was an old dual (Kroonen 2013: 383).
7. *op*, *up*, *ip* ‘up’ < PGm. \**upp(a/e)* (Kroonen 2013: 120–21). This word did not contain an *i*-mutation factor. Therefore, its vocalism continues \**u* in closed

syllable. However, in the eastern half of West Flanders, ‘up’ has the unrounded reflex *ip*; see Verstegen 1943: 303 + Map 6, Taeldeman 1971: 193–7, 232–3, 261 Map 4, *FAND* I, map 92. Taeldeman (1971: 195 and 233) assumes that \**up* shared the unconditioned fronting of \**u* to \**ü*, which he dates to the ninth – tenth centuries. Around the same time, according to him, the word would also have taken part in the Flemish unrounding of \**ü* to *i*, but this seems unlikely for chronological reasons: ‘up’ would have undergone unconditioned fronting earlier than all other words in \**u* which have /œ/ in Middle or Modern Dutch. Additional doubts arise from the absence of Middle Dutch attestations of unrounded *ip*.

Still, the core of Taeldeman’s view may be correct, viz. that *op* /ɔp/ underwent unconditioned fronting to *up* /œp/ in West Flanders but not in French Flanders. This geographic distribution of *u* vs. *o* is quite frequently found, see Taeldeman. The unrounding to /i/ in eastern West Flanders and the westernmost strip of East Flanders is more likely to post-date the medieval period. Phonetically, the unrounding of vowels before a labial consonant is a trivial development. *Schoppe* ‘spade’ is found as *schippe* in about the same area where we find *ip* ‘up’, and, as I will argue below, they probably underwent the same development. Note, furthermore, that the unrounding in *wertel* < *wurtel* ‘carrot’ is also found in central Flanders.

8. *rund, rind, rend* ‘bovine’ < \**xrinþaz-* n., \**xrunþa-* (OS *hrīth*, OHG (*h*)*rind*, OFri. *hrīther*, OE *hrīðer* < \**xrinþaz-*; MLG *runt, ront*, OE *hrýðer* < PGm. \**xrunþa-*). Two Old Dutch toponyms from East Flanders probably contain this etymon: *Rondeslo* ‘Ronsele’ (1105) and *Hrintsalis* (639 copy 941), *Hrintsale* (802 copy 941) ‘Rindsele’. In Early Middle Dutch, there are eleven attestations of the simplex ‘bovine’ plus nine compound forms such as *rindsvleesch* ‘beef’. All have *e*- or *i*-vocalism. The southeast (Cleves/Guelders DAT.SG. *rinde*, Glossarium Bernense *rendes strote, rensborst*) and Holland (Dordrecht *rentvlesch* ‘beef’, *rinsbuk* ‘cow’s belly’, chancery toponyms *rintvelt, rintvene*) vacillate between *e* and *i*. In West Brabant (*render*) and in Ghent (sg. *rent*, PL. *rend(e)re*), only *e*-vocalism is found. VMNW s.v. *rint* ‘bovine’ and EWN s.v. *rund* argue that Flanders and Holland have unrounded \**ü* whereas West Brabant and the southeast continue WGm. \**i*. Although it is theoretically possible, this distinction seems artificial: it would be more economical to assume a single preform \**xrinþa-* for all of these forms.

The lowering of \**i* to *e* in front of nasal plus consonant is widespread in Middle Dutch. Van Loey (1980: 18) considers it to be most frequent in East Flanders and Limburg, but it is also well known in Brabant. Hence, *rend-* can easily represent earlier \**rind-*. Two additional arguments can be mustered against Flemish and Hollandish *rend* being a reflex of \**ü*. Firstly, unrounding in

coastal dialects is usually matched by an *i*-mutated /y/ or /œ/ in Brabant and the east, but this is not the case for ‘bovine’. Secondly, the Old Flemish place-name *Hrintsale* looks genuinely old because of the absence of *i*-mutation in *-sale* < \**sali*. That is, the name might indeed belong to the seventh century. At such an early date, the *i* in the first syllable can hardly be due to unrounding of \**ii*.

Forms with a rounded vowel first appear in Late Middle Dutch, particularly in Utrecht and the northeast (MNW). For charters from Holland and Utrecht before 1500, Heeroma (1935: 25 and Map 10) has found that *rint* (or *rent*) featured in the western cities (Alkmaar, Haarlem, Leiden, Delft, Brielle, Dordrecht) whereas *runt* was found in the east of North Holland (Enkhuizen, Hoorn, Amsterdam) and in the province of Utrecht. This matches the fact that, in Middle Low German, *rond* and *runt* are characteristic of the western areas (Schiller & Lübben 1875–81: 532) which border on eastern Dutch. In Dutch, the western provinces and Brabant stick to *rent* during this period. Kiliaan (1599) has both *rind* and *rund*, but the compounds show that *rind* was the unmarked form for him. By the seventeenth century, *rund* has become the only variant in northern Dutch texts.

This leaves the question of how *rund* in Holland and Utrecht is to be explained. Its attestations start too early and too far west to explain it from the introduction of the northeastern Dutch and Low German variant. Van Loey 1980: 22 mentions that MDu. *e* is often rounded to *u* before *lC* but in some cases also before *nt*, most notably in *sunte* ‘saint’.<sup>130</sup> Indeed, the data from the VMNW (see also Map 46 in Berteloot 1984a and Mooijaart 1992: 91–3) confirm this view. *Sente* ‘saint’, which was borrowed from Old French with /ɛ/, yields *sinte* and *sente* in most dialects, but *sunte* is found beside *sente* in some towns in central, southern and southeastern areas: in Utrecht and Arkel, in Cleves, in Kortenberg, Rumst, and Brussels (South Brabant), and in Maastricht. Breda has one instance of *zonte*. This spread confirms that *runt* may well be due to rounding of *rent* in the dialects of Utrecht and other central areas. The absence of *runt* from the thirteenth-century material may be due to the fact that the word does not occur in official documents from Brabant or further east in that century.

In modern dialects, a mid-to-low front vowel can still be found in two main southern areas, see Map 22: in central and eastern Limburg, where the realizations /ɪ/ and /ɛ/ connect to Ripuarian; and in East Flanders, particularly in its northern half, which has /ɛ/ or /æ/. The unrounding in southeast Flemish dialects is of the productive type.

<sup>130</sup> *Vrunt* ‘friend’ is a different case. OS *friund*, OHG *friunt* would yield a front rounded /y:/ in eastern Middle Dutch, of which *vrunt* may represent shortening before *nt*. See § 19.4 on this noun.



Map 22. Front unrounded vowels (/ɪ/, /e/, /ɛ/, /æ/) in 'rund' according to GTRP

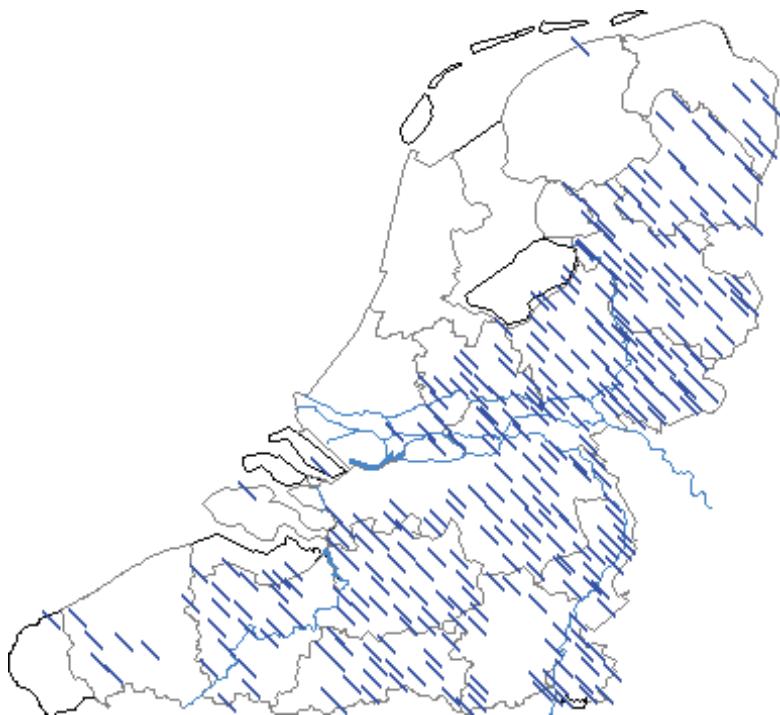
9. *schoppe, schuppe, schippe* 'spade' < \**skupjō-* and \**skuppō-* (MLG *schüppe*, MoLG *Schuppe*, Schüppen, MoHG *Schippe*, dial. *Schüppen*)

Late MDu. *sc(h)uppe, sc(h)up* is found in Holland and Utrecht, *schup* in *Teuthonista* (1477), *scop* 'scoop' in Edam (1491–1500). For Kiliaan (1599), *schuppe* is the normal word whereas he calls *schoppe* Flemish and Hollandish. From 1600, *schup* starts to be replaced by *schop* in the literary language of Holland. For the distribution in the modern dialects, see Taeldeman (1971: 193–97, 232–33, Map 4), de Schutter & Taeldeman (1972: 35–37, for *schop* in the meaning 'baker's peel'), and FAND I, map 115. Here I provide three separate maps based on the GTRP dataset. Map 23 shows that the front rounded vowels /œ/ or /ø/ are common in eastern and central Dutch, as well as in East Flanders. The back vowels /o/, /ɔ/, /u/ in *schop(pe)* can be found on Map 24. Zealand, Holland and western North Brabant generally have *schop(pe)*, and a back vowel is also found in central parts of Limburg.<sup>131</sup> In the southwest, French Flanders has /o/ and southwestern West Flanders has fronted /œ/.

<sup>131</sup>. The long /o:/ found in central parts of Limburg points to F. \**skōpō-*, whence Standard Dutch *schoep* 'paddle, blade'.

Map 25 displays unrounded *i* or *e*. This is found in Frisian (MoWF *skeppe*), and in the productively unrounding areas in West Limburg and along the Dender. More unexpectedly, unrounded *schippe* is common in parts of West Flanders.

The presence of the front vowel throughout Brabant and East Flanders and in all eastern dialects decidedly points to a preform \**skupjō-*, beside which umlautless \**skuppō-* may also have existed (witness the *o*-forms in Groningen and Limburg). Under the hypothesis that secondary *i*-mutation was lost in the west due to language contact, it is ultimately impossible to tell whether coastal Dutch *schoppe* represents WGm. \**skuppō-* or \**skupjō-*.



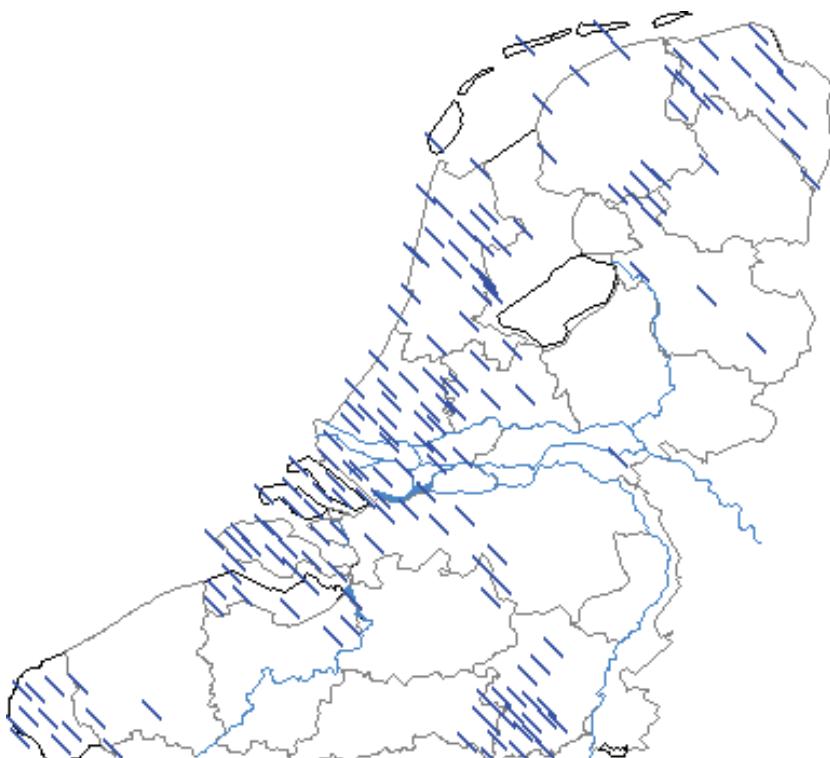
Map 23. *schop*, front rounded vowels

#### *Interpretation of op and schop*

The similar etymology and behaviour of *op* ‘up’ and *schop* in Flanders justifies a joint discussion of unrounded *ip* and *schip*. The West Flemish area with *op*, *up*, *ip*, and *schoppe*, *schuppe*, *schippe* can be viewed in two ways. One solution is that *schippe* goes back to \**skupjō-* and is due to the early unrounding of ODU. \**ü* in Flanders. Yet the structural difference between *schippe* and the other old cases of unrounding is striking: *brigge*, *dinne*, *pit* etc. are always found with unrounding in

French Flanders, but further to the east they have ceded to *u* or *o* in varying degrees. That is not the distribution found for *ip* and *schippe*. Also, *ip* does not continue an *i*-mutated vowel.

A different hypothesis is therefore more likely, viz. that *schippe* goes back to *schoppe* just like *ip* must go back to *op*. We can assume that all of coastal Dutch had umlautless *schoppe* and *op*, which underwent unconditioned fronting to *schuppe* and *up* in West Flanders. This regional distribution is unsurprising, see the maps in Taeldeman 1971. The areas with *schippe* and *ip* must be due to a more recent, incidental unrounding of *schuppe*. It was caused by the following bilabial consonant *p*, in other words, *schippe* and *ip* result from dissimilation of the rounded vowel *u* before the bilabial stop.



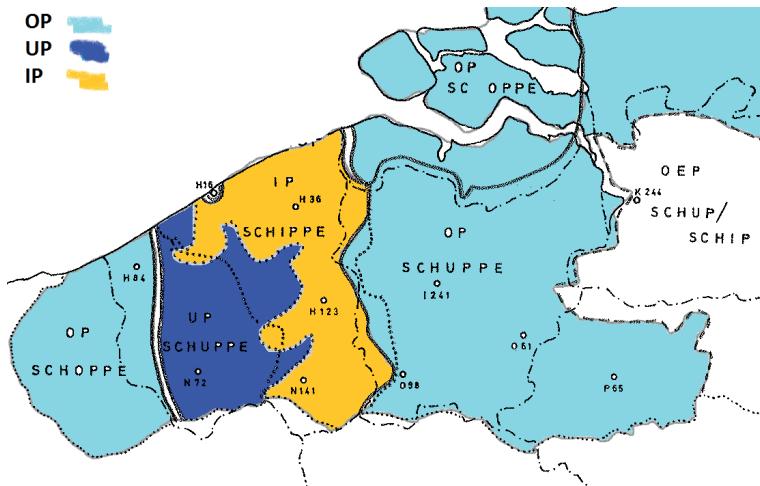
Map 24. *schop*, back vowels



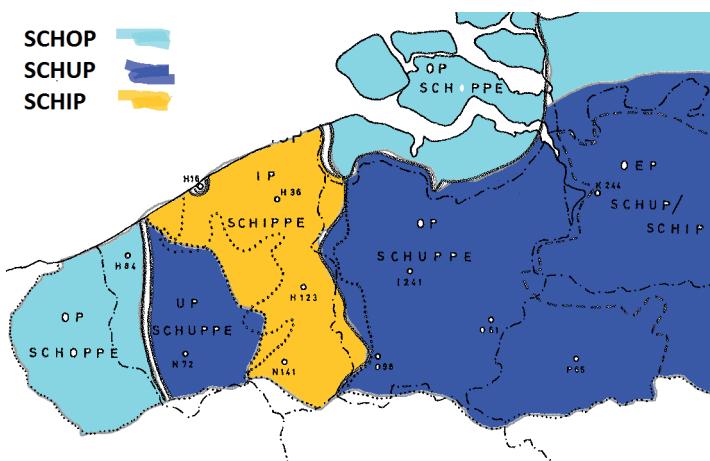
Map 25. *schop*, front unrounded vowels

The relative chronology *o* > *u* > *i* is reflected in the geographic distribution of the variants. Maps 26 and 27 show the distribution of /ɔ/ in light blue, /œ/ in indigo, and /ɪ/ in yellow for ‘up’ and ‘spade’ (disregard the word for ‘spade’ on Map 26 and the word for ‘up’ on Map 27).

A possible third case resembling the unrounding in *op* and *schop* is *tobbe* ‘tub’. Middle Dutch mostly has *tobbe* but sometimes *tubbe*, e.g. in the accounts of Zealand. Modern Dutch generally displays *tob(be)*, but in West Flemish we find *tubbe* beside *tibbe* (de Bo), East Flemish *tobbe*. The geographic distribution is unknown to me, but in view of the position before *bb*, the unrounding of *u* to *i* can be compared with that in *schop* > *schup* > *schip* ‘spade’. The word is absent from modern Zealandish (WZD).



Map 26. Vowel variation in 'up' (based on Map 4 in Taeldeman 1971: 261)



Map 27. Vowel variation in 'spade' (based on Map 4 in Taeldeman 1971: 261)

10. *schuld* 'guilt, debt' < \**skuldi-*. In Early Middle Dutch, VMNW claims the existence of one unrounded instance among dozens of tokens of *schuld*, *scout*, viz. in the ACC.SG. *ouer scelde* in Ghent (1281). It occurs in the concluding line of a series of names together with the amount of money these persons have promised to Saint Jacob's brotherhood: *ende men es [sculdech] .xx. sol. ouer scelde darof weet willem cabus de rekenighe*. Yet instead of *ouer scelde* 'on debt', *ouer scelde* is almost certainly to be read as 'across the Scheldt', as it is in other

instances in the Ghent documents. Hence the passage means: ‘and [those from] across the Scheldt they owe 20 sol. [to us]; Willem Cabus knows the account thereof.’ A possible unrounded instance is Flemish *sceldech* ‘obliged’ (Lancelot Romance, line 10701, early 14th century). Modern dialects (except the regularly unrounding ones) show no unrounding in *schuld* according to the GTRP database.

11. Middle Dutch *selen* ‘shall’ in South Brabant and East Flanders has been interpreted above as the result of unrounding of *sülen* due to unstressed usage (§ 15.1.1, nr. 21).
12. The town of *Ukkel*, now a part of Brussels, is spelled *Uccla* in the twelfth century, *Ucle*, *Uclo* in the early thirteenth, and occurs as DAT.SG. *uckele* in local texts from the last quarter of the same century. The lemma *Ukkel* in VMNW contains a number of surnames *van ikele*, *van iekele*, *van ycle*, *van icle* in texts from Brussels (1276) and in obituaries from Antwerp (1248–71), to which *de ycla* (ibidem, 1301–10) may be added. The dictionary interprets the toponym in these surnames as the unrounded variant of *Ukkel*, but the main argument seems to be the absence of a good alternative identification of the toponym.

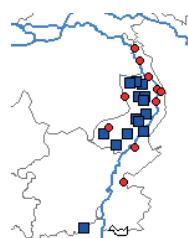
The identification of *i(e)kel(e)* as Ukkel is problematic for linguistic and philological reasons. Linguistically, the short vowel in *van uckele* disagrees with the long vowel in *i(e)kele*. Also, since Ukkel is written with a short /œ/ in all well identified tokens until 1300, the existence of a variant *i(e)kel(e)* at the same time and in texts from the same area seems unlikely.

Philologically, the context in which unrounded *van iekele* occurs does not force us to assume identification with Ukkel, since the other surnames in the same context come from all over Brabant. Thus, *iekele* in doc. 182 from CG (Brussels, 1276) occurs in connection with the town of Lier, southeast of Antwerp: *een ander guet ... dat hi hilt te erue van arnoude van liere, dien men heedt van iekele* ‘another good ... which he holds in inheritance from Arnoud of Lier, who is called of Iekele’. The same document mentions *Heinric van ikele* within an enumeration of noblemen from all over Brabant, including a few towns outside of it (Zottegem, Wesemael). The Antwerp Obituaries (1248–71) a few times mention *ycla* as the place of origin of deceased women: *Elyzabeth de ycla, lijsbethen van ycle, ver alyen van ycle, Ogerden van Icle*. In principle, *ycle* could have been used to spell rounded /y-/; though this is infrequent. In any case, it seems to be a different name from *iekel(e)*.

13. *vont, vunt* ‘baptismal font’ < WGm. \*funtō- F. and \*funti- (cf. MLG *funte*, *vunte*, *vonte* F.; OFri. *funt, font*; OE *font*) is a loanword from Latin *fōns, fontem*. Middle Dutch normally has *vunte*, *vonte*. Kiliaan (1599) knows both *vonte* and *vunte*. According to WNT, *u*-vocalism (meaning short /ö/) is found in modern dialects

particularly in Groningen and in southern Dutch, including Zealand (WZD). *RhWb* mentions *vønt* with a front rounded vowel for Cleves and Rees, and it also occurs as ‘well, source’ in toponyms around Duisburg. This area borders on the East Limburgian area with front vowel in *vunt* and *doopfunt* as attested in the older dialect enquires SGV and RND, indicated on Map 28. These forms clearly point to the existence of an *i*-mutated form \**fünfte*.

The same preform is also required by the unrounding to *i* in Limburgian. The oldest Dutch attestation of ‘baptisterium’ is *vinte* in the *Glossarium Bernense* (1240). Since unrounding does not otherwise occur in medieval Limburgian, VMNW considers *vinte* to have come from a Flemish original, but this is unnecessary in view of the supporting evidence from later Limburgian sources. We find *vander heyligher vinten* ‘of the holy font’ in the diary of Christiaan Munters, chaplain of Kuringen near Hasselt, in entry from November, 1537 (Grauwels 1972: 63), and *om ... een geconsacreerde vinte te setten* ‘to place a consecrated font’ in the local archives from 1608 of the village of Wijchmaal in northern Belgian Limburg (Molemans 1979: 274). Therefore, *vinte* must be accepted as a real Limburgian form. Unrounding is also quite well attested in the dialect material of SGV and RND, where unrounded *vint*, *vintj*, *vink* occur in northern and central Limburg and in one relic instance in Sluizen near Tongeren, as indicated on the map. These are areas without productive unrounding of \**ü*, so that *vint* can be directly compared with the 1240 attestation *vinte*. Since the vowel is preceded by the labial *v*-, unrounding here is reminiscent of the unrounding of \**ü* in ‘wish’ and ‘to wish’ (see 15.2.1, nr. 19).



Map 28. ‘Font’ in Limburg according to the data from SGV and RND. Circles: front rounded vocalism; squares: front unrounded vocalism.

14. The verb form *wende* ‘lived’, attested once in Ghent (1270–91), was explained by Pijnenburg (1989: 154) as a case of unrounding, but VMNW regards it as a scribal error for \**woende* /wo:ndə/.

Table 37. Unrounding in closed syllable, survey

etymon	WGm.; MDu. gender	attestations
brug	* <i>brugjō-</i> F.	<i>brigge</i> (Fla.), <i>bregge</i> > <i>breg</i> (Hol.)
Dubbel	* <i>dublō-</i> ? * <i>dubbilō-</i>	<i>dibble</i> , <i>Dibbel-</i>
dun	* <i>punni-</i> ?	<i>dinne</i> (CDu.)
dunken	* <i>punkjan</i>	<i>dinken</i> (Fla.Zea.), <i>di/unken</i> >> <i>donken</i> (Hol.)
gruppe	* <i>grupjō-</i> F.	<i>groppe</i> (le), <i>grippe</i> (le) (Fla. Zea. Hol.)
hul	* <i>xulja-</i> M.	<i>hil</i> , PL. -s (Fla.), <i>hil</i> (Hol.)
kruk	* <i>krukjō-</i> F.	<i>cricke</i> , <i>Crick</i> , <i>krikke</i> (Fla.), <i>kri/ek</i> (Hol.)
kunne	* <i>kunja-</i> N. >> F.	<i>kinne</i> (Fla.)
-mulde	* <i>muldjō-</i> F.	- <i>melde</i> , - <i>milla</i>
mug	* <i>mugjō-</i> F.	<i>mig</i> , <i>meg</i> (NH)
munt	* <i>munitō</i> F.	<i>minten</i> (Mechelen)
put	* <i>putja-</i> M.	<i>pit</i> , PL. -s (Fla.), <i>pet</i> (Hol.)
rug	* <i>xrugja-</i> M.	<i>ric</i> (Fla.), <i>rig</i> (Zea.), <i>regge</i> (ZH), <i>rec</i> (NH)
schutte(n)	* <i>skutjō-</i> F., - <i>jan-</i> v.	- <i>skitte</i> (Fla.), <i>schette</i> (WFla.), <i>Schittingh-</i> (Fla.)
stuk	* <i>stukja-</i> N.	<i>stik</i> , PL. -s/-er (Fla.), <i>stik</i> (Hol.)
tocht	* <i>tuxti-</i> F.	<i>ticht</i> (Hol.)
unsel	* <i>unciale</i>	<i>einser</i> , <i>aeyssel</i> , <i>enssel</i> (Fla.)
vrucht	* <i>furxti-</i> F.	<i>vrecht</i> (Brab.?)
wens(en)	* <i>wuncka-</i> , * <i>-jan-</i>	<i>wensch</i> (Fla.Brab.), <i>winsch</i> (Lower Rhine)
zonde	* <i>sundi/-jō-</i> F.	<i>sende</i> , <i>sinde</i> (Brab.)
zulle	* <i>suljō-</i> F.	<i>sille</i> (WFla.)
zullen	* <i>skul-i-</i>	<i>selen</i> (EFla.Brab.Hol.), <i>sellēn</i> (Hol.Utr.; maybe because of SG. <i>sel</i> )
zult	* <i>sult-jō-</i> F.	<i>zilte</i> , <i>zelte</i> (WFla. Zeal.)

### 15.2.5 Summary and interpretation

#### a. In closed syllable

Table 37 provides a survey of the evidence in closed syllable from 15.2.1. If we are stricter about the evidence that is relevant for unrounding of ODu. \*ü in coastal Dutch, some forms can be excluded. For instance, *wensen* may be due to unrounding of earlier [ö] after a bilabial consonant, *Dubbel*(*monde*, -*dam*) did not contain an *i*-mutation factor, *munt* is only rarely found with unrounding, etc.

Table 38 groups the remaining fourteen items forms according to their morphology. There are eight feminine *jō*-stems, one *ja*-stem adjective, and five masculine or neuter *ja*-stem nouns. It is immediately clear that the second syllable is retained in the Early Middle Dutch and modern Flemish unrounded forms in the

feminine *jō*-stems (*brigge*, *grippe*, *krikke*, -*skitte*, *sille*, *zilte*) and in the ADJ. *dinne*. The noun *mig*, *meg* is only attested in North Holland, in dialects which apocopated -*e* in the modern period in all of the lexicon. Hence *mig*, *meg* do not contradict the possibility that Middle Dutch had \**migge*.

By contrast, apocope has already taken place in the *ja*-stems *hil*, *pit*, *rik*, and *stik*. The noun *kinne* is only an apparent exception, since it has become feminine: with its -*e* it thus behaved just like the feminine *jō*-stems. The ADJ. *dinne* is the only one of its kind.

Table 38. Unrounding in closed syllable, morphology

etymon	WGm. stem type	attestations
brug	* <i>brugjō-</i>	<i>brigge</i> (Fla.), <i>bregge</i> > <i>breg</i> (Hol.)
gruppe	* <i>gruppjō-</i>	<i>grepp(e)le</i> , <i>grippe(le)</i>
kruk	* <i>krukjō-</i>	<i>krikke</i> (Fla.), <i>kri/ek</i> (Hol.)
-mulde	* <i>muldjō-</i>	- <i>melde</i> , - <i>milla</i>
mug	* <i>mugjō-</i>	<i>mig</i> , <i>meg</i> (NH)
schutte(n)	* <i>skutjō-</i>	- <i>skitte</i> , <i>schette</i> (Fla.)
zulle	* <i>suljō-</i>	<i>sille</i> (WFla.)
zult	* <i>sultjō-</i>	<i>zilte</i> , <i>zelte</i> (WFla. Zeal.)
dun	* <i>punja-</i> ADJ.	<i>dinne</i>
hul	* <i>xulja-</i>	<i>hil</i>
kunne	* <i>kunja-</i>	<i>kinne</i> (Fla.)
put	* <i>putja-</i>	<i>pit</i> , PL. - <i>s</i> (Fla.), <i>pet</i> (Hol.)
rug	* <i>xrugja-</i>	<i>rik</i> (Fla.), <i>regge</i> (ZH), <i>rek</i> (NH)
stuk	* <i>stukja-</i>	<i>stik</i>

This distribution can hardly be coincidental. Note, first of all, that a lexical solution is out of the question, *pace* Buccini 1995: 56, who regards the unrounded forms as “lexical Ingvaenisms”. It would be an extreme coincidence if, of all the Old Franconian words with /ü/, only nominal *jō*-stems and *ja*-stems would have been replaced by their Proto-Frisian counterpart whereas all other words would have been adopted without change from Old Franconian. The words in the table above do not form a natural semantic class of the kind which one might expect to show up in a substratum layer (cf. van Bree & Versloot 2008). Versloot (2014a: 35) additionally points to the *d*- of *dinne* which does not correspond with the *t*- which this word has developed in Frisian.

Since the dialects to the east of Flanders regularly retain -*e* in MDu. *hulle*, *putte*, *rugge*, *stukke*, it follows that apocope in *hil*, *pit*, *rik*, *stik* took place within Flemish. Was the final syllable lost for phonetic reasons or due to analogy? An analogical origin might be envisaged in view of the gender difference. Word-final -*e* was characteristic of the large group of feminine (*j*)ō-stems, whereas a zero ending in

the nominative and accusative was a feature of masculine and neuter *a*-stems. As there was no phonetic apocope of Early MDu. *-e* in Flemish (Marynissen 2004), this gender distinction has survived and become productive in Flemish dialects to the present day (cf. de Wulf & Taeldeman 2010). One might therefore hypothesize that the masculines and neuters *\*hille*, *\*pitte*, *\*rigge*, *\*stikke* analogically replaced the ending *\*-e* by zero. However, this is in conflict with the evidence of some of the other neuter *ja*-stems in Flemish sources of the thirteenth century, which retain *-e* in the NOM.ACC.SG.: *bedde* ‘bed’, *beelde* ‘image’,<sup>132</sup> *blecke* ‘bleaching agent’, *bunre* a land measure, *ende* ‘end’, *e/arve* ‘(inherited) property’, *here* ‘army’, *cāse* ‘cheese’, *mudde* ‘sack’, *nutte* ‘useful’, *rike* ‘realm’.<sup>133</sup> Only Flemish NOM.ACC.SG. *net* ‘net’ < *\*natja-* (versus Limburg, Brabant *nette*) and ACC.SG. *rec* ‘rack’ < *\*rakja-* (otherwise *recke*) also have a zero ending. This situation renders an analogical explanation of the apocope in *hil*, *pit*, *rik*, *stik*, *net*, *rek* unattractive: we would not understand why it did not apply in *bedde* and other nouns.

Thus, there may be a phonetic reason for the difference between *hil* and *bedde*, and this is indeed what previous scholars have already assumed. Schönfeld & van Loey (1970: 51) note that most of the words with unrounding of *\*ü* are monosyllables with a stem-final geminate which arose by *j*-gemination. They argue that “het schijnt, dat deze soort van consonant het best de mouillering vasthield”.<sup>134</sup> In other words, the palatality of the stem-final consonant would have influenced the outcome of apocope. This does not yet explain the restriction of apocope to masculines and neuters, but it is not difficult to find a link.

In masculine and neuter words such as *hil* < *\*hüll* < *\*xuljaz* and *stik* < *\*stükk* < *\*stukja*, the final syllable was lost in West Germanic, but not before the stem-final consonant was geminated. Kortlandt (1992, 1993) and Boutkan (1995: 209–13) reconstruct an intermediate stage with a palatalized geminate, i.e. *\*hull'*, *\*stukk'*.<sup>135</sup> On the strength of Old High German forms such as NOM.ACC.SG.n. *peti*, *beti* ‘bed’, *weti* ‘deposit, security’ (Braune & Reiffenstein 2004 §201 Anm.4), Kortlandt and Boutkan assume that the palatalized geminates developed (or analogically acquired)

<sup>132</sup>. WGm. *\*bilipja-*.

<sup>133</sup>. Masculine *ja*-stems nearly all have the suffix *-ere* < *\*-arja-*. These generally retain final *-e* in Flemish. The word *mudde*, with its rounded vowel, shows that it probably does not belong to the same linguistic layer as *pit*, *stik*, etc. As a common term for trade, it was probably borrowed several times.

<sup>134</sup>. “It seems that this kind of consonant best preserved the palatalization.”

<sup>135</sup>. Boutkan 1995: 209: “Kortlandt points out to me that the northern difference between OE *secg* and *here*, *ende* suggests a direct connection between vocalization of *\*-j-* and gemination: in geminated forms *\*-j-* did not vocalize.” Hence from *\*sagjas* arose OE *secg*, but from *\*andias* and *\*xarjas*, which did not geminate the consonant, arose OE *ende* and *here*.

the NOM.ACC.SG. ending *\*-i*, yielding *\*huli*, *\*stuki*. In these forms, the consonant was then replaced by the geminate from the oblique case forms: *\*hulli*, *\*stukki*. What matters to us is the reconstructed stage *\*hull'*, *\*stukk'*. If the Old Franconian NOM.ACC.SG. of *hil*, *pit*, etc. had this form (or, rather, such forms with allophonic /y/, *\*hüll'*, *\*stükk'*), their monosyllabic form in Early Middle Dutch follows logically.

In a shift scenario, we could argue that the type *\*stükk'* was adopted into Proto-Frisian as monosyllabic, and its (allophonic) front rounded vowel was unrounded. The new variant would acquire the forms NOM.ACC. *\*stikk(')*, GEN. *\*stikkəs*. In the feminine *jō*-stems, the ending *\*-a* was not absorbed by a preceding palatalized consonant. This scenario is represented in Table 39.

In a continuity scenario, the type *\*stükk'* stayed monosyllabic and lost its allophonic rounding for a different reason, viz. because it occurred only in a restricted number of lexemes at that stage. In both scenario's, the Flemish m. and n. words with Early MDu. *-e* (*bedde*, *ende*, etc.) may reflect the regular Continental West Germanic reflex *\*-i* of *ja*-stems after a heavy syllable (*ende*) or after an ungeminated consonant (*here*), cf. Boutkan 1995: 209. We can thus explain the gender-sensitive behaviour of the *j*-stems as the result of familiar phonetic and morphological changes, without the need to resort to the (alleged) semantic status of the words. The forms in *-e* of the central and eastern dialects (*hulle*, *stucke*, etc.) would show that the generalisation of NOM.ACC.SG. *\*-i* in this stem type did not reach Flanders.<sup>136</sup>

Table 39. Language shift scenario for unrounding

West Germanic	Old Franconian	coastal Dutch
<i>*stukkja-</i>	> NOM.ACC. <i>*stükk'</i> , GEN. <i>*stükk'jes</i>	→ <i>*stikk</i> , <i>*stikkəs</i>
<i>*bruggjō-</i>	> NOM. <i>*brügg'u/i</i> , GEN. <i>*brigg'ja</i>	→ <i>*briggə</i> , <i>*briggə(n)</i>

Marynissen (1995: 194f., 235) and Klein (2004: 263–6) explicitly note the similarity between the inflectional behaviour of *ja*-stems in Flemish and their development in Old Frisian and Old English, where these stems show a zero reflex in the NOM.ACC.SG. after light stems: OE *bedd*, OFri. *bed*. This behaviour is contrary to that of eastern Dutch and German, which display *-i*: OHG *beti* and *betti*.<sup>137</sup> Marynissen

136. If this scenario is correct, the Flemish forms preserve an older Franconian stage than the oldest Franconian texts that we have (which have *hrucci*, *nezzi*, etc.). The theory of Kortlandt and Boutkan that there was an intermediate stage with a palatalized geminate would be confirmed in an independent way.

137. According to Klein, the main cause of the difference in reflexes of *\*-i* was the date of the generalization of geminates from the oblique cases (*\*badja-* > *\*baddja-*) to the NOM.ACC.SG. In Anglo-Frisian, this would have happened before *i*-apocope (hence NOM.ACC. *\*beddi* > *bedd*) but

ascribes the loss of the NOM.ACC.SG. ending in Flemish *ja*-stems to an early loss of the ending. Yet this does not suffice to explain Flemish *hil*, *pit*, *net*, *rec* beside the type *bedde*, *beelde*, *blecke*, *bunre*, *ende*, *erve*, *here*, *cāse*, *mudde*, *nutte*, *rike* with retained -e. Nor does it seem likely that the phonetics of the stem-final consonant were decisive, in view of *net* vs. *nutte*, *stik* vs. *blecke*, *rike*. The distribution of apocopated and non-apocopated nouns is difficult to explain with the data we have. Some aspects of it may be due to dialect contact: for instance, some non-apocopating forms in Flemish may be due to the early adoption of Brabantish forms, such as the commercial word *mudde* ‘measure’, whose invariant /œ/ (no unrounding, no back vowel) is also conspicuous.

The pervasive absence of unrounding in all *jan*-presents with a geminate consonant (such as *schudden*, *schutten*, *stutten*, *kussen*, *hullen*, *vullen*, *druppen*, dial. *jucken* ‘to itch’) can be explained from paradigmatic analogy, i.e., from forms in the paradigm which did not have a geminate consonant, such as the 2SG. and 3SG. present indicative. In StDu. *jeuken* ‘to itch’, the lengthened vowel of those forms won out over the geminate consonant.

The following nominal *j*-stems lack unrounding: the adjectives *nutte* ‘useful’ < \**nutja-*, *vlug* ‘quick’ < \**flugja-*; the neuter nouns *geschut* ‘projectiles’ < \**gaskutja-*, *geluk* ‘luck’ < \**ga-lukja-*, *kudde* ‘flock’ (which later became feminine) < \**kudja-*, *mudde* ‘hectolitre, sack’ < \**mudja-*, *mulle* ‘dust’ < \**mulja-*, and the feminine *jō*-stem *hulle* ‘cover’ < \**xuljō-*. Probably, a variety of individual explanations applies to them. They could have retained /œ/ under the influence of cognate lexemes (e.g., *nut* ‘use’, *schieten* ‘to shoot’, *lukken* ‘to manage’, *verhullen* ‘to cover’) or be due to eastern influence (*mudde* and *kudde*?).

### b. In open syllable

Table 40 summarizes the evidence for unrounding in open syllable. Some of the unrounded forms are quite general in all of coastal Dutch (in particular, *evel*, *krepel*, *hepe*), but most of the others are more restricted in time or region. This collection thus differs from the evidence in closed syllable (*brigge*, *pit*, etc.), which is distributed much more evenly across all coastal dialects. I therefore suggest that the unrounding in open syllable happened later than in closed syllables. In fact, as we will see, it must post-date the unconditioned fronting of post-language-contact \*u in western Dutch.

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in High German, after *i*-apocope (hence \**beti* remained, only later to be replaced by *betti*). The central and eastern Dutch forms *hulle*, *bedde*, etc. would thus belong to the High German type of development. Note that this would not help to explain the difference between Flemish *hil* and *bedde*, found *within* the same dialect.

Table 40. Unrounding in open syllable

etymon	WGm.	attestations of unrounded forms
Clear evidence for unrounding:		
2. <i>deuvik</i>	* <i>dubika-</i>	<i>devik</i> (CDu., 17th c.; Breda, 1836)
3. <i>euvel</i>	* <i>ubila-</i>	<i>evel</i> (CDu., all periods)
4. <i>heup</i>	* <i>xipi-</i>	<i>hepe</i> (MDu. Hol. Fla.)
7. <i>kneukel</i>	* <i>knukila-</i>	<i>knekel</i> in CDu. (1640+)
8. <i>kreupel</i>	* <i>krupila-</i>	ODu. <i>Crepelfliet</i> (NH), MDu. <i>crepel</i> (Fla., Hol.)
9. <i>meuzie</i>	* <i>musjō-</i>	<i>messien</i> (WFle., 1285), MoWFle. <i>meuze</i> , <i>meze</i>
10. <i>peluw</i>	* <i>pulwīna-</i>	<i>pelu</i> (Fla. 1163), <i>pelew</i> (13th c.); <i>peluw</i> (after 1800)
11. <i>Rupelmonde</i>	* <i>rupila-?</i>	<i>Ripelmunda</i> (1187), <i>Repelmonde</i> (1340+)
12. <i>reuzel</i>	* <i>rusila-</i>	<i>resels</i> (Hol. 1465–85), MoHol. <i>rezel</i>
13. * <i>sneudel</i>	* <i>sn(a)udila-</i>	<i>Snedelwike</i> in SHol. (13th c.), <i>snedel</i> (SHol., 15th c.)
14. <i>veulen</i>	* <i>fulina-/an-</i>	<i>velene</i> (Holl. 1462), <i>velken</i> (Bruges 1300)
15. <i>volik</i>	* <i>fulika/ō-</i>	<i>velik</i> (Hol.), <i>vilke</i> (Z.), <i>vilck</i> (Hol.), <i>vilke</i> , <i>vulke</i> (Fla.)
16 <i>vleugel</i>	* <i>flugila-</i>	<i>vlegel</i> (Hol., Antwerp, 1400–1700)
Uncertain evidence:		
1. <i>deuvel</i>	* <i>dubila-</i>	<i>degel</i> , <i>devel</i> (MoFle.), <i>deur-develt</i> (NHol., 1584)
5. <i>heuvel</i>	* <i>xubila-</i>	hapax <i>hevele</i> (Van Maerlant's <i>Troyen</i> )
6. <i>keuken</i>	* <i>kukīnō-</i>	<i>kekene</i> (hapax, Ghent, 1376)

Two generalizations can immediately be made on the basis of the data:

1. In *devik*, *evel*, *hepe*, *krepel*, *Repelmonde*, as well as in uncertain *devel* and *hevel*, the unrounded vowel is followed by the labial consonants *p* or *v*. The first four words probably have the most widely attested unrounding of this group in diachronic and geographic terms. Counterevidence without unrounding consists of the word *heuvel* 'hill' < \**xubila-*. Note that *Dubbel-* > *Dibbel-*, the one word with unrounding in closed syllable not from *i*-mutation, also has the vowel before a labial consonant.
2. In *messien/meze*, *peluw*, *velen* and *velik/vilke*, the unrounded \**ü* is preceded by a labial *m*, *p* or *v*. Among the counterevidence we find *beugel* 'clasp' < \**bugila-*, *speuren* 'to watch' < \**spurjan* and (*ge*)*beuren* 'to happen' < \**burjan*.

The unrounding of rounded vowels in open syllable next to a labial consonant can be interpreted as dissimilation. In coastal Dutch, it bears the character of a tendency rather than a sound law. The fact that these unroundings happened in the coastal Dutch dialects may be explained from the structure of the vowel system. In coastal Dutch, before unconditioned fronting of \**u* took place, front rounded vowels were basically restricted to the reflexes of Old Dutch \**iu*, which was not a very frequent phoneme. Thus the unrounding can be understood as a reaction to

the rise of new words having /ø/ and /ø:/). This would most logically have taken place at the time when \*u was being fronted, which gives us a roughly similar date for both phenomena in the relative chronology of sound changes. On a smaller scale, and possibly a later date, the same sequence of events gave rise to short *up* > *ip* and *schuppe* > *schippe* in central Flanders. The reverse tendency, viz. to round the mid front vowels /e/ and /e:/ in the vicinity of velar consonants, *r* and *l* (e.g., Middle and Modern Dutch *tegen* > *teugen* ‘against’, *lenen* > *leunen* ‘to lean’, MDu. *rese* > MoDu. *reus* ‘giant’) can then be understood as acoustic hypercorrection.

Words which were not unrounded, such as *heuvel* ‘hill’, may have got their front vowel at a later date than the unrounding lexemes, or they may have retained their front rounded vowel for other reasons. In *vleigel*, *knekel*, and *snedel*, the rounded vowel stood before a velar obstruent (as in the hapax *kekene*), and after *l* or *n*, which may also have led to dissimilatory unrounding.

### c. General conclusions

The main conclusions of this chapter are:

1. coastal Dutch *brigge*, *pit* etc. had Old Franconian \*ii plus a (palatal?) geminate, but no synchronic umlaut factor.
2. The apocope in *hil*, *pit*, *stik*, *rik*, *net*, *rek* confirms that an endingless stage with final \*-CC(') existed in the Old Franconian *ja*-stems.
3. West Flemish *ip* and *schippe* show recent unrounding of West Flemish *u* /œ/.
4. coastal Dutch *evel*, *krepel* etc. show recent unrounding of *eu* /ø:/, mainly before and after labial obstruents.

If these solutions are correct, they imply that nearly all instances of Old Franconian allophonic \*[ü] by *i*-mutation from \*u were adopted (by Proto-Frisian, in the language shift scenario), or rephonologized (by Old Flemish, in the continuity scenario), as /u/. Only if WGm. \*j had been absorbed by the (palatalized) geminate stem-final consonant did \*[ü] develop into /i/ in coastal Dutch.

The words with /i/ or /ɛ/ from \*[ü] were gradually replaced by words with /ø/ in the subsequent centuries, as speakers from the coastal regions were more permanently exposed to varieties with such rounded vowels. Important towns such as Ghent introduced these front rounded phonemes in their system and spread them further afield into Flanders. This scenario explains why *e/i*-relics such as *brigge* and *pit* are strongest in the westernmost parts of Flanders, and why they are in general more present in Flanders and Zealand than in Holland, which was defrisianized at a later stage. Also, it becomes understandable why *e/i*-relics are found particularly often in (micro)toponyms, in words for other (small) natural phenomena (*mig*), and in terms which were later replaced by heteronyms in central and eastern dialects, such as *peluw* >> *kussen*.

d. *On the geographic distinction between i and e*

The vocalism of the unrounded short vowel is either /i/ in all coastal dialects or /e/ in Flanders and Zealand versus /ɛ/ in Holland. It has also been observed, e.g. by Miedema (1980b, 1988), that the coastal Dutch distribution can be compared to a similar distinction in English. In Old English, WGm. \**ü* usually yields /y/ whence unrounded /i/, but Kentish and some Mercian charters show a lowering to <e> = /ɛ/. The unrounding can be dated to around 900 AD (Luick 1964: 168, 253, 261). The explanation of this geographic difference is unclear. Miedema (1980b: 183, 1988: 26–7) hesitantly proposes that the product of unrounded \**ü* initially was \*i in all regions, only to be lowered to \*e in Holland (and Southeast-England) at a later stage. This would explain why Flanders did not share in the lowering. Versloot (2014a: 33–5) also draws the parallel with Old English. He furthermore shows that there was no uniform reflex in Proto-Frisian, since Insular North Frisian requires \*i/ (InsNFri. *brag* ‘bridge’) where the other Frisian dialects require a reconstruction \*e/ (OEFri. *breg*).

Note that there is no absolute geographic dichotomy: /i/ can also be found in North Holland, and /ɛ/ in Zealand and Flanders. From the Hollandish 20th-century dialect data for StDu. *brug*, *rug*, *kruk*, *put*, *mug* and *stuk* collected in Heeroma 1935,<sup>138</sup> the following picture emerges:

- *brug*, *rug* and *put* have /ɛ/ in all dialects, but *brigge* is attested for Vlaardingen in 1879.
- *kruk* has /ɛ/ in Texel, Wieringen, Callantsoog, Petten, Assendelft and Noordwijk, but /i/ in Katwijk, Scheveningen and Vlaardingen;
- *mug* has /i/ in Texel, Wieringen, Callantsoog, and a rounded vowel elsewhere;
- *stuk* has /i/ in all dialects.

Flanders and Zealand also show variation. For instance, we find *dinne* and *denne* in Flanders, and *grippe* and *greppe* in Zealand. It follows that the description “/i/ in Flanders versus /ɛ/ in Holland” does not do full justice to the data.

A phonetic conditioning for the distribution of /i/ and /ɛ/ in coastal Dutch is difficult to see. Was it a chronological distinction? Since the early, Old Dutch instances of unrounding (*brigge*, *hil*, *pit*) have *i*-vocalism, it is conceivable that \*/ü/ was first unrounded to /i/ (as one would expect), only to be lowered to /ɛ/ in parts of England, Friesland and coastal Dutch afterwards. We thus return to Miedema’s hypothesis of 1980b. Miedema (p. 182) furthermore stressed the difference between classical Old Frisian <e> and the rarer reflex <i>, which according to him comes up in the course of the 15th century, particularly before consonants such as *l*, *rC*, *m*, *n*, *k*, *g*: *brigge*, *girdel*, *hil*, *hirne*, etc. This topic would require further investigation.

<sup>138</sup> I omit *knuppel* for the reasons indicated above. The data from Egmond are irrelevant as this dialect has productive unrounding of front rounded vowels.

### 15.3 Fronting of \*u and \*o in coastal Dutch

WGm. \*u and \*o are reflected by Middle Dutch fronted /œ/, /ø:/ and back /ɔ/, /o:/. For the main theories on the historical development, see § 15.1. The principal questions which this section addresses, are:

1. Does coastal Dutch show evidence of the Old Franconian difference between \*u and \*ü (i.e., does it show *i*-mutation of \*u)?
2. Does coastal Dutch show traces of the allophonic distribution of [u] and [o] according to the putative Proto-Frisian system (e.g., with [u] before nasals and after labial consonants), according to the Old Franconian system, or is there a different distribution altogether?

The relevant forms from Middle and Modern Dutch will be discussed according to the following parameters:

- The position of \*u in closed or open syllable. In the case of alternating paradigms, e.g. of *a*-, *i*-, and *u*-stems with a light root syllable, in which the nominative and accusative singular would yield a Late Old Dutch closed syllable as against an open syllable in the oblique cases, the word will be classified according to the more common reflex in Modern Dutch.
- The presence or absence of an *i*-mutation factor in West Germanic and Old Dutch. The mutation factor may have been present in all paradigmatic variants of the lexeme, as would have been the case, for instance, in *ja*-, *jō*- and *īn*-stem nouns, *jan*-verbs, *ila*-diminutives, and *īna*-adjectives. Or the mutation factor was lost in certain forms of the paradigm, such as with heavy *i*-stems, where \*-i would be lost in the nominative and accusative singular (see § 15.1.2). In such cases, if *i*-mutation surfaces in inland Dutch, it may in principle also have applied in the input forms of coastal Dutch.
- The type of consonant following \*u. I distinguish the following categories: 1. labial stops (*p*, *b*); 2. labial fricatives (*f*, *v*); 3. alveolar stops (*t*, *d*); 4. alveolar fricatives (*s*, *z*); 5. velar stops (*k*, *gg*); 6. velar fricatives (*g*, *ch*); 7. single nasals (*m*, *n*); 8. nasal clusters (*mp*, *mb*, *mm*, *nt*, *nd*, *nk*, *ng*, *nn*); 9. laterals (*l*, *ll*, clusters *lC*), 10. single *r*.<sup>139</sup>

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<sup>139</sup>. The position in closed syllable before *r* (i.e., before *rr* and *rC*) will be left out of consideration in view of the frequent tendency in many regions of Dutch to front short back vowels before *rC*; cf. FAND I: 176–79, 256–65 on *zorgen*, *dorp*, *kort*, *dorst*, *borstel*, *wortel*, *worm*.

In his discussion of the evidence, Taeldeman (1971: 181–3, 251–2) includes what he calls affective words, e.g. *bok* ‘he-goat’, and onomatopoeia, e.g. *slok* ‘sip’. I will disregard both categories. As to the former, there is nothing specifically affective to ‘he-goat’, and, in general, the border between neutral and affective lexemes cannot be drawn in any falsifiable way. As to the latter, it is usually clear which words are really onomatopoeic, and they can easily be factored out in the conclusions.

The words discussed below have been collected on the basis of a search in the etymological database of *EWN* and in a number of secondary sources, such as historical grammars (van Helten 1908: 147–48, Taeldeman 1971, van Loey 1980, Weijnen 1991: 11–2, Goossens 2008: 73–7, van Loon 2014: 204–8) and various other books and articles. Words are selected if their etymology is reasonably clear with regard to the presence of stressed \**u* and the presence or absence of an *i*-mutation factor, and if they are sufficiently attested in western dialects to have a bearing on the problem addressed in this chapter. The discussion is organized in the following way: § 15.3.1 discusses words with a short vowel in Middle and Modern Dutch (subsection A contains the words with *i*-mutation, B those without *i*-mutation), § 15.3.2 deals with words with a lengthened vowel (also subdivided into A and B, whereas § 15.3.3 looks at words with etymological variation between /u/ and /ü/. In § 15.3.4, the results of this long section rich in material will be discussed.

### 15.3.1 Short vowel

#### A. With *i*-mutation

##### 1. p, b

*druppel* ‘drop’ < \**druppila-* (next to MDu. *dropel* and *droppel*). The modern variants *droppel* and *dropel* are found in two West Frisian dialects, in the north of South Holland, on Goeree-Overflakkee and in northern Zealand, in the westernmost part of French Flanders, and sporadically in the Betuwe. The western *droppel*-areas are typically conservative dialect areas. This does not apply to the sporadic inland dialect forms from Utrecht to Limburg, where *droppel* competes with suffixless *drop* ‘a drop’ (see section B below on this noun), by which it may have been influenced. Map 29 charts *droppel* with /o/ or /ɔ/ in the *GTRP* dataset. For inland Dutch, we must assume that *druppel* had *i*-mutation. Coastal Dutch /œ/ in all of Flemish and southern Zealandish may either be due to unconditioned fronting or to influence of the verb *druppen* ‘to drip’. In West Flanders the lengthened variant *drepel* was the usual one (de Bo 1892), and *MAND* gives it for large tracts of West and East Flanders. It is not mentioned in *WZD*.



Map 29. Short back vowel in *druppel* in GTRP

*druppen* ‘to drip’ < \**drupjan-*. The verb is not attested in the thirteenth century. Yperman (15th c., Flemish) has the abstract *druppinghe*. In Early Modern Dutch *druppen* is the usual literary form, but *droppen* is attested in 17th-century authors from Holland.

*huppen* ‘to hop, hip’ < \**xuppōn-* or \**xupjan-*, frequentative *huppelen* ‘to skip, leap gaily’. The variant *hippen* (first found in 1624) is probably not due to unrounding of \**ü*, but represents earlier variation in the root vowel. *Hippelen* is more frequent than *hippen*, especially in literary sources of the seventeenth century. *Huppen* is first reliably attested in Kiliaan (1599), but *huppelen* is already attested in 1460–62 (EWN), and indirectly in *huplync* ‘frog’, lit. ‘hopper’, in *Teuthonista* (1477). For variant *hoppen* Kiliaan gives no regional indication. A consonantal variant is *hubbelēn*, *hobbelen*.

*kub* ‘weir, basket; reed roof’ < \**kubjō-* (Kroonen 2013: 308 s.v. \**kuban-*). MDu. *cubbe* (attested in Amstelland and in Overijssel), Early MoDu. *kubbe*, especially in Holland.

*lubben* ‘to castrate, lib’ < \**lubjan-*. Early MDu. *lubben* (1240, Limburg). All literary occurrences in Middle and Modern Dutch have <u>.

*schoppen* ‘to kick’ < \**skuppōn*- ‘to shove’ (Kroonen 2013: 450). MLG *schüppen* ‘to push away’ and MHG *schupfen*, *schüpfen*, suggest a variant with *i*-mutation. In Limburg, southern dialects also show a front rounded vowel but the northern ones do not. In Brabant, most dialects except the southeastern ones have *schuppe(n)*. The back vowel seems to agree with that of the noun ‘kick’, so that the noun may have influenced the verb here. The verb has a back vowel in Zealandish, but Flemish also has *schuppen* (e.g., in Ghent and in Waasland) and unrounded *schippen* (de Bo 1892). Hence, we may assume the same order of events as postulated for the noun ‘spade’ in Flemish (see § 15.2.4, nr. 9), viz. *schoppen* > fronting to *schuppen* > unrounding to *schippen*.

*schub* ‘scale (of a fish)’ < \**skubjō-* (MLG *schubbe*, MoWF *skobbe* ‘id’; MoHG *Schuppe* was shortened from OHG *schuop(e)* < \**skōpō-*). Modern dialects in Limburg and Brabant generally have *schub* with *i*-mutation. In the sixteenth century, a few northeastern Dutch attestations of *schubbe* occur. Kiliaan has *schubbe van den visch*, but he notes a variant *schobbe* for Holland and Guelders. From the seventeenth century on, *schub* is the literary form. Flemish mostly has the plural *schubben* (WVD) but Zealandish has *schobbe* from Walcheren to Goeree-Overflakkee (WZD). In North Holland, the adjective *schobbig* has been replaced by *schubbig* (Boekenoogen 2004: 465).

### 3. t, d

*grut(te)* ‘grit, small fry’, *gort(e)* ‘groats’ < \**grutjō-*. The variant *grut(te)* is only attested from Early Modern Dutch onwards, always with fronted <u> and mainly in Holland and Zealand. It can be explained as a borrowing from German, unless it represents a dialectal shortening of /y:/ as in MDu. *grute* ‘oats, ingredient for beer’. The older form is *gort(e)* with *r*-metathesis before dental obstruent, attested with <ur> in Holland and Flanders in the thirteenth century. Possibly, the metathesis explains the prevailing *o*-vocalism in later stages of Dutch.

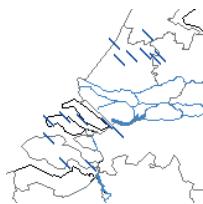
*kudde, kud* ‘herd, troop’ n. > f., from PGm. \**kudja-* n. (MLG *küdde*, OHG *kutti*, MoHG dial. *kütte, kitte*, OFri. *ked*). The word is always attested with <u>.

*kut* ‘vagina’ < \**kutjō-* (MLG *kutte*; MHG *kotze* ‘whore’, Bavarian dial. *kütze* ‘part of the intestines’). The noun is clearly related to WGM. \**küt(j)a-* or \**küti-* ‘spawn, calf of the leg; soft part of the body’, see § 19.1. Early Modern Dutch *cutte* (1599), *kutte* (1563). Always attested with <u>, but the word does not appear frequently enough to make strong claims about the history of the vowel.

*mud(de)* ‘hectolitre’ < \**mudja-* n. (OS *muddi*, OHG *mutti*, MoHG *Mutt*; OE *mydd*), a loanword from Latin *modius*. Late Old Dutch *mudde* already occurs in Ghent (1101–1200), and after 1200, *mudde* is found in southern dialects hundreds of times. Never found with <o>.

*nut(te)* ‘useful’ < \**nutja*- . Early Middle Dutch only has *nutte* and the denomina-tive verb *nuttēn* ‘to use’. We similarly find <u> in all later varieties.

*schudden* ‘to shake’ < \**skudjan*- (OS *skuddian*, MoHG *schütten*, OFri. *skedda*). The verb is generally found with <u> in earlier Dutch, but as *schodde* in dialectal *men biene schoddeme* ‘my legs are trembling’ in the farce *Lammert Meese* by A. van Steyn (Delft, 1661). Nearly all modern dialects show a front rounded vowel, except for two small areas with *schodden*: a compact area in the north of South Holland (plus Aalsmeer and two villages in northwestern Utrecht), and sporadic traces in Zealand and northwestern Brabant (see Map 30). For North Holland, Boekenoogen (2004: 455) gives the frequentative *schodderen* ‘to walk while shaking’. Thus, the Delft form *schodde* of 1661 is a precious trace of the erstwhile generally Hollandish and Zealandish *o*-vocalism.



Map 30. Short back vowel /ɔ/ or /o/ in *schudden* (GTRP database)

*geschut*, MDu. *ghescutte* ‘artillery’ < \**gaskutja*- n. (MLG *geschutte*, MHG *geschütz(e)*, *geschuzze* ‘projectile’). Always with <u>, but it may have been influenced by the noun *schutter*.

*schutten* ‘to lock in, stop; protect’ < \**skutjan*- . Always with <u>. Modern Zealandish also has *schotten*, but it may have been influenced by the *a*-stem *schot* ‘partition, fence’.

*schutter* ‘marksman’, first attested in 1240, replacing older *schutte* < PGm. \**skutjan*- m. (OHG *scuzzo*, OE *scytta*). Eastern Dutch regularly has *i*-mutation in both nouns, and southern Brabant shows unrounding to *schitter* (Goossens 2014: 146–48). In West Flanders and Zealand, both the original noun and the *r*-variant are found with a back vowel in a number of dialects (RND sentence 92, WZD).

*stutten* ‘to prop’ < \**stutjan*- (MLG *stütten*, OHG *-stuzzzen*, MoHG *stützen*). Always found with <u>.

#### 4. S, Z

*busse, bosse* ‘case, shaft; hub’ < \**buxsi*- (G. *Büchse*; Goossens 2008: 73, TNZN 3.6). Limburgian *bus* /boes/ shows *i*-mutation. Modern West Flanders and Walcheren have *busse*, whereas central and eastern Flanders and Zealand have *bos(se)*. A fronted form already occurs in *bus* (Bruges, 1285–86). *Bosse* stands beside *busse* in Middle Dutch from Holland, and the twentieth-century dialect of Gouda had *bos* ‘sick-fund’, probably from ‘(money) box’ (Lafeber 1967: 75).

*bussel* ‘bushel’ < \**buskila-*. Early MoDu. *bussel(e)*. The spread of this noun can be found in TNZN 7.6 (‘sheaf’) and 7.8 (‘bushel of straw’), but the maps give no vocalic variants. The dictionaries show that Zealand has *bussel*, Ghent and north-eastern Flanders /bysəl/, Ninove /bušəl/. A variant *bossel* is sporadically attested in the seventeenth century with Hollandish authors.

*kussen* ‘to kiss’ < \**kusjan-*. Spelled with <u> in all but one of the 38 literary attestations in Early Middle Dutch. In modern dialects, northern Zealand and the islands of South Holland have or had *kossen* (van den Berg 1952: 60; WZD).

*koster* ‘church warden’, a loanword from Old French *costre* from Medieval Latin *custor*. In Dutch, the word has been treated (at least by eastern dialects) as having the productive, umlauting suffix \*-arja- of agent nouns. Hence we find *kuster* in modern dialects of Limburg, Brabant and Guelders. In Flanders, Zealand and Holland, the usual form is *koster*, in West Flanders also *kostere*. The back vowel can be due to the regular absence of *i*-mutation in western Dutch, or to a date of borrowing after the rise of unconditioned fronting of \**u*.

*kussen* ‘cushion’, MDu. *cossen*, from Gallo-Romance \**kuissinū* (Old French *coissin*). All dialects, west and east, have a front rounded vowel (or its unrounded counterpart) with the exception of two relic areas with *kossen*: one in Zealand, and one in northern South Holland (GTRP database).

*kust* ‘choice’ < \**kusti-* (Goth. *gakust* ACC.SG.; OS *cust*, OHG *kust*, OFri. *kest*, OE *cyst*). The word is rarely attested in Middle Dutch, and in Modern Dutch it only survives in the expression (*te*) *kust en (te) keur* ‘in plenty, galore’. North Hollandish *kustebood* ‘auction of real-estate’ has been attested a few times as *kestebood* in the nineteenth century (Boekenoogen 2004: 282), but it always has <u> in earlier texts, which makes it questionable whether we are dealing with an old case of unrounding.

*lusten* ‘to please, list’ < \**lustjan-* (MoWFri. *lête*; beside \**lustōn-* ‘to desire’), *lust* ‘lust’ < \**lustu/i-*. The verb is always *lusten* in Middle Dutch, whereas *lostēn* first occurs in the sixteenth century and hardly ever afterwards. Its back vowel may have been influenced by the noun *lost*, *lust* ‘desire’ (*lost* in Brabant and Overijssel, but also in fifteenth-century Holland), which originally had no *i*-mutation.

*mus*, MDu. *mussche* ‘sparrow’ < \**musk(j)ō-*. The GTRP database shows a front rounded vowel in all eastern, *i*-mutating dialects, and unrounding only in the southern, productively unrounding ones (FAND I, map 113). Western dialects partly have a back vowel *o*, viz. all of Zealand except Zeeuws Flanders, all traditional South Hollandish dialects, and Westfrisian (which has *mosk*). Since Modern West Frisian also has *mosk* ‘sparrow’ without *i*-mutation (also Wangeroog *mûzûk* and North Frisian *mösk*, *määsk* < \**mosukō-*), as do some German forms (MLG *musche*), it appears that West Germanic had both \**muskō-* and \**muskjō-*. Still, for western Dutch, we can assume that Zealandish and Hollandish *mos(k)(e)* is a relic form, and that all of Flanders displays unconditioned fronting.

## 5. k, g

*bukken* ‘to stoop’ < \**bukk(j)an-*. Zealand has *bokken*, as does the older Gouda dialect (Lafeber 1967: 74), while North Holland has *bokken* beside *bukken*. Flemish has *bukken* (de Bo 1892).

*druk* ‘pressure; busy’ < \**brukki-* (OWFri. *treck*). MDu. *druc* in Flanders, *droc* in Holland. StDu. *druk* may well have been influenced by *drukken* ‘to press’. Archaic dialects of Zealand have *drok* ‘busy’ (WZD), as does North Holland (Boekenogen 2004).

*drukken* ‘to press’ < \**brukjan-* (OWFri. *thretza*, *tritza*, MoE dial. *thrutch*). Flemish has *drukken*. The verb is absent from a number of dialect dictionaries, such as Zealandish and North Hollandish.

(*ge)luk* ‘luck’ < WGm. \*(*ga)lukkja-*. Early MDu. *ghelucke* (Limburg) and *gheluck* (Flanders) point to an original neuter *ja*-stem. Spellings with <*o*> are extremely rare, and unrounding is never found. In modern dialects, however, *gelok* and the verb *lokken* are found in northern Zealand (WZD) and on Goeree-Overflakkee (Landheer 1951).<sup>140</sup> The relatively stable form *geluk* in North Holland (see the undated map by Kloek),<sup>141</sup> which never loses *ge-*, suggests that that form was taken from the standard language.

*mug* ‘midge’ < \**mugjō-*. For the occurrence of unrounded *mig*, see § 15.2.1. A back vowel form *mog*, *mohhe* is attested in Zealand and in the central Hollandish relic area. Elsewhere, we find a fronted vowel (GTRP).

*plukken* ‘to pluck, pick’ < \**plukjan-* or from Romance \**pilukkāre*. The latter would not explain the *i*-mutation found in eastern Dutch and G. *pflücken*. In Middle Dutch, the verb is also attested as *plocken*, especially in Holland; this coincides with modern *plokken* as found in northern Zealand (WZD), on the islands of South Holland, and generally in North Holland (Boekenogen 2004). Low *o* is also found in some of the modern Flemish dialects (de Bo 1892). In this verb, the back vowel in the present may come from the preterite, where East Limburgian inf. *plökke*, 3sg. pret. *plocht* (beside newer *plook* and *plökde*; data from the 1914 SGV enquiry), shows a preterite without umlaut.

*rukken* ‘to jerk’ < \**rukjan-* or \**rukkōn-*. *Rocken* is found in seventeenth-century Holland and in modern dialects of Utrecht; *rucken* is also found on Goeree-Overflakkee (WZD), whereas the verb *rukken* is unusual elsewhere in Zealandish. The original preterite was *rochte*, which could in theory have influenced the vowel of the present. For North Hollandish, Boekenogen mentions that *rucken* used to occur for what is now *rukken*, though it is unclear whether he implies this only on the basis of earlier written texts or also for the spoken dialect.

<sup>140</sup>. See also the map by van Ginneken in the archives of Meertens Institute, <http://www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=25130>.

<sup>141</sup>. <http://www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=24304>.

*stug(ge)* ‘stiff, dour’ < \**stugja-*. Always *u*, including in Zealand, but hardly attested in Flanders.

*sukkelen* ‘to be ailing’ < \**sukkilōn-*. We find Late MDu. *suckelen* ‘to stagger, drag along’ in Flanders and the same form in Early Modern Dutch. Modern Dutch *sukkelen* has the same form. A derived noun is *sukkel* ‘clumsy person’. For central and northern Zealandish, WZD mentions as the basic forms *sokkel* for the noun and *sokkel(n)* for the verb.

*vlug(ge)* ‘that can fly well, winged; quick’ < \**flugja-* (OHG *flucki*). The oldest attestation is *ulugghe* in West Flemish (1287), and all subsequent texts have *u*. In modern dialects, Brabant has *vlug*, but the word seems rare in Flanders and is absent from WZD. Groningen has *vlog(ge)*.

## 6. cht

*berucht* ‘renowned, infamous’ < \**bī-xrōftipa-*, past participle of the verb MDu. *beruchten*, Hol. *beruften*, *berochten*, ‘to accuse’. The verb itself was derived from the noun *ruchte* ‘shouting, cry’ < \**xrōftja-* to the ptc. \**xrōfta-* ‘called’. It is generally found with a front vowel <*u*> in Middle and Modern Dutch: Early MDu. *berucht* ‘suspect, accused’ (WBrab., 1291–1300), and *berucht* is the usual form in Hollandish literature after 1600. The form *berochtet* ‘accused’ in the medieval accounts from Zutphen may hide a front vowel /œ/.

*gehucht* ‘hamlet’ < \**ga-xubtja-*. All Modern Dutch literary attestations have *u*. According to the maps in the Meertens Archive,<sup>142</sup> the word has a front rounded vowel in all dialects of the Netherlands – with the exception of an area in Drente which has *o*, but which may be due to analogy with *hof*.

*gerucht* ‘rumour’, MDu. *gheruchte* ‘clamor’ < \**ga-xrōftja-* n. (MHG *geruofte*). All literary instances have *u*; no dialectal forms with *o* were found.

*klucht* ‘section, part, generation; farce’ < \**klufti-* (OHG *kluft* ‘crack, crevice’, MoHG *Kluft*, MLG *kluft*, OFri. *kleft* ‘hamlet’, ME *clift*, MoE *cleft*). In modern inland dialects, there is a striking vacillation between front and back vocalism. According to the maps from the Meertens Institute archives,<sup>143</sup> *klocht(e)* or *kloft(e)* is found in northern and eastern North Brabant, Liemers, Twente, northwestern Overijssel, northern Drente and North Groningen, whereas *klucht/kluft(e)* appears in southern North Brabant, Limburg, most of Gelderland and South Drente. This points to an alternating paradigm with *i*-mutation in only some case forms in Old Dutch. Middle Dutch *cluft(e)*, *klucht(e)* ‘section, hamlet’ is mainly attested in northeastern dialects, and points to *i*-mutation. East Brabantish *clochtelike* ‘largely’ (1276–1300)

<sup>142</sup>. <http://www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=25118>.

<sup>143</sup>. <http://www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=25472>.

could well represent a front rounded vowel. The western Dutch (Flanders, Holland) meaning ‘farce, joke’ is first attested in 1510 and always has <u>. In Zealand, *klucht* can mean the ‘handle of a spade’. For North Holland, Boekenoogen (2004: 243–5) mentions *kloft* and *kloffer* (with variants *knoft* and *knofter*) as words for a ‘very small parcel of land’. The fronted variant *kluft* there has the meanings ‘road ascending a dike; bridge; pile of dung’ and ‘element in a sawing mill’. It must be noted that the o-vocalism may in theory have been influenced by *kloof* ‘gap, cleavage’ and the participle *gekloven* to *klieven* ‘to cleave’.

*nuchter* ‘sober’, a loanword from Latin *nocturnus* (MLG *nuchtern*, *nochtern*, OHG *nuohtarnīn*, *nuohturn*, MHG *nüehtern*, MoHG *nüchtern*; MoWF *nochteren*, *nofteren*). Early MDu. *nuchterne*, *enugterne* (Limb., 1240), *en ogteren* ‘soberly’ (Rijkhoven, Limb., 1280–90); MoDu. *nuchter* ‘calm, realistic’. Boekenoogen 2004: 347 mentions *nochter* as the usual North Hollandish form. According to WZD, *nochter(en)* is found in central and northern Zealand, whereas Zeeuws Flanders agrees with Flanders in having *nuchter(en)*. Modern Limburgian dialects have *neuchter* /nø:çtər/, which points to ODU. \**nōxtarn-* with *i*-mutation factor, that is, the same preform as is required to explain OHG *nuohtarnīn*, MoHG *nüchtern*. Whereas EWN thinks that *nocturnus* was influenced by \**üxt(w)ō-* ‘morning’, this is contradicted by the root vowel \**ō*. Hence, we may alternatively suggest that Romance \**noktúrnu* was adopted into the phonological system of Germanic as \**nōxturn(j)a-*, with long /*ō*/, since short /*o*/, at this stage of Germanic, was still only an allophone of /*u*/ before a low vowel. One could also imagine that the initial vowel was lengthened in Romance (cf. French *nuit* <*\*nōkte*>), but it is uncertain whether the lengthening would also have applied in pretonic position. Western Dutch *nochte*, *nuchter* shows the usual shortening of long vowels before the cluster *cht* (as in *ochtend* ‘morning’).

*vluchten* ‘to hide; to flee’ <*\*fluxtjan-*, or, more probably, originally derived from the noun ‘flight’. Rarely MDu. *vlochten*.

*vocht(ig)* ‘damp’ <*\*fūxti-* <*\*funxti(ja)-* (OS *fūht*, G. *feucht*). Strictly speaking, we are dealing with *i*-mutation of \**ū*, but long vowels before *cht* were already shortened in the Old Dutch period (cf. *licht* ‘light’, *verkocht* ‘sold’) in most dialects.<sup>144</sup> The neuter of the original adjective ‘damp’ was substantivized as ‘moisture’ in Middle Dutch or even earlier. In Middle Dutch, <u> seems particularly frequent in eastern dialects. For instance, *Teuthonista* (1477) has *vucht(e)* in all instances, which suggests an *i*-mutated vowel. But also the translation of Bartholomeus Engelsman,

<sup>144</sup> Though *vugteg* in *Glossarium Bernense* (1240) may well represent /vūxtəx/. A Guelrish ms. of the 16th c. has *vuychticheit* ‘humidity’. Limburgian, in general, seems to retain long vowels better in this position, as shown by the dialectal correspondences for *nuchter* ‘sober’, *zacht* ‘soft’ and *licht* ‘the light’.

printed in Holland in 1485, has *vucht*. Kiliaan (1599) under *vocht* refers to *voecht* /vo:xt/, and has the main entry as *voecht, vucht*. The earlier Plantin dictionary (1573) also treats *vocht* and *vucht* as equal forms. Only in the seventeenth century does *vucht* gain the upper hand in written Dutch. Modern Hollandish dialects generally show *vucht*.

*vrucht* ‘fruit’ < \**fruxtu-*, a loanword from Latin *fructus*. See FAND I map 118 for the modern variants. An *i*-mutation factor is betrayed by the front rounded vowels in eastern Dutch and Ripuarian. This suggests an earlier transfer from *u*- to *i*-stem, though in Old Germanic there are no traces of such a change. In Dutch, /œ/ is also normal in Holland and Flanders. A single instance of *vrocht* is found in Ursem in West Friesland, and there is a small *vrocht*-area in the north of South Holland and adjacent western Utrecht, from Katwijk to Kamerik.<sup>145</sup>

*zuchten* ‘to sigh’ < Late ODU. \**sýftón* < WGm. \**siuftjón* (MLG *suften, suchten*, OHG *síftón, sífteon*, MHG *siuftén, siufzen*, MoHG *seufzen*, Ripuarian *züchte, züüete*; without *t*-suffix: MHG *siufen*, OE *séofian* ‘complain’ < \**siuf(ō)jan*). Early MDu. *sugten* (1240), *suchten* (1265–70). Nearly all Modern Dutch dialects have a front rounded vowel in this verb, with the exception of the rural northern South Hollandish area, for which the GTRP database has /zoxtə(n)/. In Early Middle Dutch, the verb is attested with <*u*> in all tokens, which all stem from southern Dutch. Variants with <*o*> are very rare in Late Middle Dutch and absent from Early Modern Dutch. All of the data thus suggest that the verb had a front vowel in eastern Dutch and that, in western Dutch, too, the front rounded vowel was the usual reflex.

## 8. mC and nC

*om* ‘about, around’ < \**umbi* (OS *umbi*, MLG *umbe, ümme, omme*, OHG *umbi, umbe*, MoHG *um*; OFri. *umbe*, OE *ymbe*, ME *umbe*). The preposition mostly has a back vowel in Modern Dutch, with the exception of a northeastern dialect area (Drente, Overijssel, Gelderland) and a southeastern one (Northeast Brabant, North and South Limburg), which both have /œ/ (FAND map 122). The lack of *i*-mutation in High German is due to the cluster *mb* which could block *i*-mutation; some Middle German dialects do have *ümbe*. In Early Middle Dutch, a front vowel in *um* is not only found in southeastern dialects but also in Holland and Utrecht, though in a minority of cases; see Berteloot 1984a, map 72. It seems most likely, therefore, that \**umbi* lost or never acquired *i*-mutation in Flanders; in later periods, the form without umlaut spread to Holland and other dialects.

<sup>145</sup>. Note that this information can be gleaned from the GTRP database as given on the internet, but not from Map 118 in FAND I, which subsumes all the South Hollandish forms under the centralized vowels [ɔ] and [ø], which it regards as variants of “[œ̄]”.

*bundel* ‘bundle’ < \**bundila-*, a diminutive of \**bunda-* ‘bond, tie’ (OS *gibund*, MHG *bunt*). Middle Dutch and Early Modern Dutch have *bondel*, and Modern Flemish dialects often show *bondel*, *boendel*. Front vocalism only starts to come up in the seventeenth century, and dominates after 1700. In Zealand, the noun has been replaced by *bunsel*. In some eastern dialects, *bondel/bundel* do not occur but *bindel* does (MDu. *bindel(e)*, MoHG *Bindel*).

*dunken, donken* ‘to seem, appear; believe’ < \**punkjan-* (see § 15.2.1 for further discussion of this verb). In the thirteenth century, Brabant and Limburg have <u> in all instances, but Zealand and Flanders only spell <i>, which may be due to unrounding of \*ü or to a merger of the verb with *denken* > *dinken* ‘to think’. In Holland, *dunken* is more frequent than *dinken*. Several times in Holland and Utrecht in the Middle Ages, the variant *donk-* is found. The distinction between unrounding throughout in Flanders and the retention of *u* in Holland is preserved in Late Middle and Modern Dutch, see WNT. Note that the preterite MDu. *dochte(n)* may have supported *o*-vocalism in the present.

*kunde* ‘knowledge, ability’ < \**kundin-*. MDu. *cunde* is the regular form, found mainly in eastern dialects (thus EWN). Under the influence of the verb *connen* ‘to be able’, *cunde* was replaced by *conde*. In Early Modern Dutch, the verb (in western Dutch) became *kunnen* and the noun, subsequently, returned to *kunde*.

*munt* ‘coin’ < \**munitō-*. In Early Middle Dutch, Holland, Flanders, West Brabant and Limburg have a front rounded vowel in *munte*, which is sometimes lengthened to /ø:/ in *muente* or *moente*. Whereas the western forms could be due to spontaneous fronting, the eastern dialects confirm that we are dealing with *i*-mutation. In modern dialects, a back vowel in *mont* is found in the central Hollandish relic area (Katwijk, Stompwijk, Aalsmeer, Zegveld, Kamerik, Aarlanderveen; GTRP database).

*zonde* ‘sin’ < \**sundi/jō-*. Modern Dutch dialects oppose eastern *zund(e)* to coastal Dutch *zonde, zoende*; see the discussion in § 15.2.1, nr. 19. North Holland knew *zonde* beside *zunde* (Boekenoogen 2004: 624). In the GTRP database, only Zandvoort, Huizen and Laren show *zunde* in North Holland, as well as De Lier and Stolwijk in South Holland. To these we may add Katwijk, where a dialect text from 1846 has *zunde* (Halbertsma 1846: 21).

## 9. 1

*bult* ‘lump’ < \**bulti-* m. or \**bultja-* (MLG *bulte*, OFri. *bult*, MoWF *bult(e)*; Old French *bousson* ‘arrow’ < \**bultjō(n)-*). The Glossarium Bernense (Limb., 1240) has thrice *boelt*, which points to a front vowel /œ/, as does West Flemish *bult* (1287). *Bult* remains the normal spelling throughout all periods of Dutch. The masculine gender and the fact that *bulte* only very sporadically occurs as a side form, suggest that *bult* continues a m. *i*-stem rather than a f. *jō*-stem. Low German *bülte* may continue \**bultjan-* (thus Franck & van Wijk 1912), an extension of the original *i*-stem.

A similar vacillation between vocalic stem and *n*-stem is found in \**bulta-* (> Du. *bout*) next to \**bultan-* (> G. *Bolzen*) ‘bolt’.

*dulden* ‘to bear, tolerate’ < \**puldjan-* (OFri. *pelda*). Although the verb must go back to West Germanic, it is not attested in Dutch texts before 1450, as opposed to *geduld*, *gedout* ‘patience’, which is found earlier. It is doubtful whether *dulden* existed as a current word in many dialects.

*gulden* ‘golden’ < \**gulþīna-*. In Early Middle Dutch, *guldin*, -en is found in Limburg, East Brabant and West Flanders, particularly in literary texts. West Flemish also has *goudi(j)n*, with replacement of *guldijn* on the model of *goud* ‘gold’. Later in Middle Dutch, semantic specialization arose in western Dutch between *gulden* ‘a golden coin, guilder’ and *gouden* ‘golden’.

*hulde* ‘favour, loyalty; praise’ < \**xulþīn-*. Normally *hulde* in Early Middle Dutch. The five West Flemish instances of (h)*oude* in the thirteenth century can be due to analogy with the adjective *houd* ‘loyal’. No certain instances of unrounding to *helde* were found, despite the claim by Franck (1910: 41).

*hulle* ‘case, cover’ < \**xuljō-*. Always *hulle* after 1200.

*hullen* ‘to cover’ < \**xuljan-*. The verb was possibly derived in Late Middle Dutch from the noun *hulle*, see EWN.

*hulst* ‘holly’ < \**xulisa-* (OS *hulis*, MLG *hüls*, OHG *hulis(a)*, *huliso*; borrowed into Old French as \**huls* > OFr. *houx*). In Modern Dutch, the noun has a front rounded vowel in all regions, see PLAND.<sup>146</sup> Although there are only few medieval attestations, there is no reason to believe that the vocalism was different in Middle Dutch. The short vowel in *hulst* points to syncope of the unstressed \**i* (probably in oblique case forms) before open syllable lengthening took place.

*houten* ‘wooden’ < \**xultina-*. In Early Middle Dutch, *hulten* is found in the Life of Saint Christine (EBrab.) and *houtin* in West Flanders. In general, Limburg also retains a front vowel and *l*. In this word, the analogical introduction of *ou* on the basis *hout* ‘wood’ seems to have been more pervasive than in *gulden*, *gouden* ‘golden’.

*mul(le)* ‘dust’, whence the ADJ. *mul* ‘loose, sandy’, < \**mulja-* ‘dust’ N., cf. OE *myl*. In the thirteenth century we find West Flemish ACC.SG. *mul*, DAT.SG. *mulle* in literary sources; Late MDu. *mol* in Flanders, *moll* in Teuthonista. Modern Flemish has *mul*. Generally, the noun has a monosyllabic NOM.ACC.SG. *mul* in all Middle Dutch dialects. The absence of -e in this *ja*-stem is striking, contrast other *ja*-stems such as *hulle* < \**xulja-*. North Hollandish *meul* ‘fine, soft’ (soil, meat) is explained by WNT from the paradigm of *meluw*, with rounding of *e* to *eu*; though it could in theory also represent fronting of lengthened \**u*. Note MLG *mol*, which does not have *i*-mutation, and could point to an alternating paradigm with and without *i*-mutation factor. Such a paradigm could only have been an *i*-stem with NOM.ACC. \**muli*, oblique \**mulj-*.

<sup>146</sup> <http://gbt.inl.nl/iWNTLINKS/DATADIR/paginazy.html?PLAND+Hulst>.

*schuld, scelde* ‘debt, obligation; guilt’ < \**skuldi-* (OS *skuld*, OHG *sculd*, OFri. *skeld, skild*, MoWF *skuld*, OE *scyld*). The earliest NOM.ACC.SG. form is attested in the gloss *cogskuld /ko:gskuld/* ‘tax on land outside the dykes’ in the tenth century. Loss of \*-i in Old Dutch led to paradigmatic alternation between *\*skuld* and oblique *\*skuldi(-)*, yielding Late ODu. *\*skoud* versus *\*sküld-* by sound law. Whereas *scolt, scoud/t* are well attested in Middle Dutch (including in the compound *scolthete, scout(h)ete* ‘bailiff’, see § 20.3.6), *schuld* has become the only form in Modern Dutch. The ADJ. *schuldig* ‘in debt; guilty’ may have contributed to the ousting of the variant *schou-*. Judging by the distribution in the thirteenth century, it would seem that Brabant generalized *scoud-* and Flanders *sculd-*, whereas Holland and Limburg retained both variants side by side.

*vullen* ‘to fill’ < \**fuljan-*. Sometimes *vollen* in Middle Dutch in Holland and the southeast, and still in modern Zealandish (WZD) and in some Hollandish dialects (e.g., *vollen* beside *vullen* in North Holland); elsewhere *vullen*. The back vowel o may be due to *vol* ‘full’.

*wollen* ‘woollen’ < \**wullīna-* (OFri. *willen, wollen*). Generally *wullin, -en* in thirteenth-century Flanders and Brabant. Kiliaan still has *wullen* next to *wollen*. *Wollen* has become the usual form, probably due to analogy with the noun *wol* ‘wool’.

*zolder* ‘attic’ < Rom. *\*solarium* < Lat. *sōlārium*. We find a front vowel in East Limburg, northeastern Brabant and in some eastern dialects of Antwerp and South Brabant. A single western Dutch front rounded vowel (transcribed as ə by GTRP) is found in Wissekerke in Zealand, though WZD does not mention a form *zulder(e)*. All other western dialects have a back vowel.

*zult, zilte* ‘brawn, head cheese’ < \**sultjō-* ‘salt water’. See § 15.2.1 for the reconstruction and the occurrence of unrounded vocalism in coastal Dutch. Wherever the vowel is rounded it is a front vowel u, never o.

See § 15.3.4 for a survey and interpretation of the results of this section.

## B. Without i-mutation

I-stems and u-stems with a heavy root syllable listed in this subsection have a back vowel in eastern dialects. For these dialects, we may assume that the case forms that did not undergo i-mutation served to generalize the non-mutated form in the whole paradigm.

### 1. p, b

*bobbel* ‘bubble’ < \**bubbalō-* (MLG *bubbele* ‘bubble’, MoWF *bobbel* ‘lump’, ME *bobles* ‘bubbles’). *Bobbel* is the usual form in literary Early Modern Dutch. In modern dialects, West Flanders and parts of French Flanders have *bubbel(e)*, but all other dialects have a back vowel in *bobbel(e), boebel(e)*, etc. (GTRP).

*dobbe* ‘pool; ditch’ < \**dubbō/an-*. It is found as Early MDu. *dobbe* (hydronym near Leiden, 1280–87) ‘stagnant water, pool, low-lying land’, Early MoDu. *dobbe* in

texts from South Holland (e.g., Leiden, 1574). Boekenoogen (2004: 95) gives many examples from North Holland. No variants with <u> are attested.

*dubben* ‘to submerge; dig out’ < \**dubbōn-* (Kroonen 2013: 109–10). The verb is attested in some literary Middle Dutch texts, e.g. van Velthem’s *Spiegel Historiaal* and the prose *Reynaert*. After 1600, the verb has gone into disuse. De Bo (1892) has *doebelen* ‘submerge’ with a back vowel. A derived noun is MDu. *dober* ‘buoy, float’ (before 1410), *dobber* (1415), MoDu. *dobber*.

*dop* ‘shell’, MDu. *doppe* < \**duppa(n)-*. The form *dup* in the Limburgian *Sermoenen* (ca. 1300) probably represents short /u/. Otherwise only <o> is found in Middle and Modern Dutch.

*drop* ‘drop (of water)’ beside *drup* < \**drup(p)a(n)-* (OS *dropo*, OHG *tropfo*, OE *dropa*). Some forms have a short vowel before -pp- whereas others show a lengthened vowel before single *p*: Early MDu. *druppen* PL. (WBrab.), *drope* SG. (Limburg, Cleves/Gelders), Late MDu. *drop* and *drope* (Holland), *druppe* (Ruusbroeck, WBrab.), Early MoDu. mostly *drop* but also *druppe* ‘drop’, *droop* ‘sauce’. In the modern standard language, *drop* only survives in the meaning ‘liquorice’ (originally: ‘a drop of liquorice extract’, 1746). The GTRP database shows three modern dialect areas where suffixless *drup* or *drop* was given as the translation of StDu. *druppel*: Groningen and northern Drente, which have *drup*; the central Peel area between Deurne and Venlo (*drup* or *drop*); and the southernmost part of Belgian Limburg, which has *drup*. Opperdoes and Wijdenes in West Friesland have *droowp*. Altogether, fronting is attested especially in closed syllable, where the noun may have been influenced by *druppen* ‘to drip’. See also s.v. *druppel*.

*dubbel* ‘double’ (from Old French *doble*, MoFre. *double*). The GTRP database shows a preponderance of front rounded vowels in the Netherlands, which may well be due to the influence of the standard language. A back vowel /ɔ/ or /o/ is found in nearly all of Limburg, Flemish Brabant, Antwerp, eastern East Flanders, and eastern North Brabant, which shows that the word was borrowed with a back vowel (see Belemans/Goossens 2000: 121, in particular for Brabant). Coastal Dutch shows an interesting distribution. French Flanders generally has /ɔ/-vocalism, and a back vowel is also frequently found in southern West Flanders (e.g. /dobələ/ in Waregem) and northwestern East Flanders. The more conservative dialects in northern South Holland, from Katwijk to Aalsmeer and Kamerik, have /dobəl/. This situation suggests that the front vowel in *dubbel* arose from unconditioned fronting in northern Dutch and spread under the influence of the standard language. In Early Middle Dutch, all texts from Flanders have <o>, whereas <u> is found only once in Dordrecht. Nearly all attestations with <u> from Late Middle and Early Modern Dutch are also from northern Dutch, whereas southern Dutch retains <o>. Note that the verb *dobbelen* ‘to throw the dice’, attested from the early fourteenth century on, has retained its back vowel in the standard language.

*hommel* ‘bumblebee’ < \**humi/ala-* (OHG *humbal*). Usually *o*-vocalism in the dialects. The noun may be onomatopoeic in origin, and the sound symbolism may have favoured a back vowel.

*hop*, MDu. *hoppe* ‘hop’ (the plant) < \**huppan-* M. *Hop* is found in modern dialects mainly in Limburg, South Brabant and East Flanders, nearly always with a short back vowel. In literary texts, we only find <o>.

*kloppen* ‘to knock’ < \**kluppon-*. Always a back vowel in Middle Dutch and in Modern Dutch dialects (*GTRP*), with the exception of the productive fronting area in Drente.

*knobbel* ‘bump’ < \**knubbVL-* (MLG *knubbe*). Found with a back vowel in eastern Dutch dialects. In North Holland, *knobbel* beside *knubbel*.

*knop* ‘button’ < \**knupp-*. No front vowel in modern dialects (*GTRP*).

*kobbe* ‘tuft of feathers, crest of a bird, knoll’ < \**kubbō-*, cf. E. *cob-web*. Also used for various animals, such as ‘spider’ (Flemish), ‘hooded lark’ (Flemish), ‘black-headed gull’ (whence StDu. *kokmeeuw*), *kobber* ‘male pigeon’ (Flemish). No front vowels are attested in *kobbe*. The word is probably cognate with *kubbe* ‘bin, weir’ < \**kubjō-* which has been discussed in section A.

*kop* ‘head’ < \**kuppa-* M. A loanword from Latin *cuppa*. No front vowels in western Dutch.

*koppel* ‘couple’, a loanword from Old French *cople*. Always with a back vowel.

*krop* ‘crop, goitre’ < \**kruppa-* ‘body, bud’ (Kroonen 2013: 307). Always with <o> in Middle and Modern Dutch.

*lob* ‘collar, formless mass’ < \**lubbō-* (E. *lob*). Kiliaan has *lobbe*, Early Modern Dutch literary texts usually have *lob*. The variant *lubbe* has its own entry *lub* in WNT and is attested, mainly as a diminutive, before 1800 with Roemer Visscher (Amsterdam, 1600), in the *Klucht van Droghe Goosen* (Amsterdam, 1632), with Wolff and Dekken (18th c.), Berkhey (end of 18th c.), and a few other North Hollandish authors. Boekenoogen (2004: 303) mentions NHol. *lubberig* for *lobberig* ‘weak, marshy’ (of land). *Lobbe* also means ‘lout’ and ‘hairy dog’, Modern Dutch *lobbes*. The frequentative verb *lobberen* ‘to stagger, wade; to hang off’, derived from *lobbe*, is now realized as *lubberen* in Dutch.

*nop* ‘burl, stud’, MDu. *noppe* ‘wool fluff’ < \**xnuppō/an-* (OE *wullhnoppa*). Always with <o>.

*op* ‘up’ beside Flemish *up* and *ip* from \**upp*. See § 15.2.4.

*pop* ‘puppet’ < \**puppōn-*? See Taeldeman 1971: 196–8 + Map 5, which shows that the word has a short back vowel in all of coastal Dutch in the Netherlands, but a front rounded vowel in West Flanders and western East Flanders. From the shape of the East Flemish /œ/-area, Taeldeman deduces that West Flanders was the original centre of the vowel fronting. Surprisingly, Taeldeman gives French Flanders as an area which also and exclusively has /œ/, whereas the *GTRP* database

mostly finds /pɔpə/ in French Flanders. If the latter is true, it would be a relic area in comparison to West Flanders.

*schop* ‘kick’ < \**skupp-*. Most western dialects have a short back vowel, but we find a front rounded vowel in northern East Flanders and in many dialects of Antwerp, North Brabant and Betuwe. The Flemish vowel may be due to unconditioned fronting, whereas the others may be influenced by the verb *schoppen* ‘to kick’.

*schop* ‘spade’ < \**skupp(j)ō-*. See § 15.2.4 for a detailed discussion of the evidence. It was shown that West Flanders was the original locus of unconditioned fronting of *schoppe* to *schuppe*, whereas French Flanders represents a relic area with retained *o*.

*schrobben* ‘to scrub’ < \**sk(r)ubbōn-* ‘to scratch’. Zealandish and Hollandish have *schrobben*, Flemish *schobben* and the frequentative *schrobbelen*. In Brabant, we find *schrobben* beside *schroeven* with /u/. Limburgian has *sjroebe* especially in the South, *schrobbe* also in the North.

*slobben* and *slobberen* ‘to eat or drink noisily’ < \**u* (MLG *slubberen*), frequentative to MDu. *slabben* ‘to drool’. Compare also Early MoDu. *slob*(*be*) ‘mud’ and *slobbe* ‘apron; drudge’. Always <*o*> in Modern Dutch sources. A southern Dutch dialectal variant with /u/ is the source of StDu. *sloeber* ‘poor sod’, for instance, West Flemish *sloeberen* ‘to eat or drink noisily’ (de Bo 1892).

*sop* ‘broth; juice, liquid’ < \**supa-* N. and \**suppō-* F., derived from PGm. \**suppōn-* ‘to soak’ (Kroonen 2013: 493). Spelled with <*o*> at all stages of Dutch.

*stobbe, stubbe* ‘stump’ (of a tree, etc.) < \**stubbō-/an-*. The first attestations with <*u*> from the documents of the Diepenveen monastery, close to Deventer, from 1534, could render either /ö/ or /u/. In literary texts of the seventeenth century, we find only <*o*>. In Flanders and Zealand the word has been replaced by *strobbe(l)*, with the variants *strubbe(l)* ‘river eel’ in West Flanders, *strubbel* ‘difficulties’ in Zealand.

*stoppen* ‘to fill, close; stop’ < \**stuppōn-*, ODu. *stuppon*. All modern dialects have a short back vowel, and all literary forms have <*o*>.

*stoppel* ‘stub’ (OHG *stupfula, stupfila*), borrowed from Latin \**stup(u)la-* (French *êteule*). A short back vowel is found in all variants of western Dutch.

*strop* ‘noose’ < \**struppan-*, derived from the verb \**struppōn-* ‘to writhe’ (Kroonen 2013: 486). Always with a back vowel.

*tobbe* ‘tub’ < \**tubbVn-*. Middle Dutch mostly has *tobbe* but sometimes *tubbe*, e.g., in the accounts of Zealand. Modern Dutch generally has *tob*(*be*), but West Flemish shows *tubbe* and *tibbe* (de Bo), East Flemish *tobbe*. The exact geographic distribution within Flanders is unknown to me, but in view of the position before *bb*, the unrounding of *u* to *i* can probably be compared with that in *schop* > *schup* > *skip* ‘spade’. The word is absent from modern Zealandish (WZD).

*top* ‘top’ < \**tuppa-* (OHG *zopf* ‘pluck of hair’). Mostly *top* in western dialects, but *tup(pe)* in Central Zealand (WZD). For North Holland, Boekenoogen (2004: 540) mentions *tup* from Assendelft which means the ‘bud’ of rushes.

## 2. f,v

*dof* ‘dull’ and *duf* ‘musty’ < \**duba-*, cf. MHG *top* ‘crazy’ (Kroonen 2013: 105). The word is only attested after 1600. The variant *duf* has been lexicalized as ‘musty, dull’ in the modern standard language. Zeeuws Flanders and West Flanders *doef* means ‘oppressive’ (of the weather; WZD), and North Holland *dof* is ‘moist’ (Boekenoogen 2004). None of these regions has a fronted variant *duf*. Even in the Willems survey from the 1880s, *dof* is always rendered with a back vowel as *doof* or (in inflected forms) *dove* in western dialects. In view of the semantic split with *duf*, this does not necessarily mean that the informants did not know *duf*. In any case, the split between *duf* and *dof* cannot be interpreted geographically.

*doffer* ‘male pigeon’ < \**dūbazan-* (Kroonen 2013: 106; MDu. *duver*, MoHG *Tauber*). Kiliaan mentions Hollandish *doeffer* as an equivalent of *duyverick* ‘male pigeon’. Modern \**duiver* would be the regular reflex of MDu. *duver*, but in some dialects, the vowel was shortened before *vr*. Map 1.6 of TNZN shows the modern distribution: West Flemish has *duver*, East Flemish *duiver*, while Zealand, Holland and Groningen, Drente and northern Overijssel have (a variant of) *doffer*. A variant \**duffer* does not occur on the map. This probably means that *doffer* was shortened directly from \*/du:fər/, i.e., from a Middle Dutch form in which \**ū* had not yet been fronted to /y:/. This matches Kiliaan’s *doeffer*. The word is therefore irrelevant for the reflex of Old Dutch \**u*.

*doft, docht* ‘thwart, rowing seat’ < \**pūftō-*. Whereas *dochte* is already attested in Middle Dutch, the Hollandish form *doft* wins out in the literary language after 1600. It is always spelled with <*o*>.

*grop* ‘coarse’ < \**gruba-*. The word has a back vowel everywhere, also *groef* in French and West Flanders.

*hof* ‘farm, court’ < \**huba-*. No front vowels are attested in modern dialects (GTRP database), nor in surnames derived from *hof*.

*juffer* and *joffer* ‘damsel, young lady; roof beam’ are shortened from MDu. *jонfer* < *jonkfer* < *jonkvrouwe* ‘young lady’. The variant *juffer* is more recent than *joffer* (mainly from Early Modern Dutch onwards), and the vowel fronting is generally ascribed to initial *j*- . In modern dialects, *juffer* is found in northeastern Brabant, *joef(er)* in southern Brabant. Unrounding of earlier /y/ or /ø/ surfaces in West Flemish *ief(f)er* ‘nun; roof beam’, East Flemish *eefer, eefvrouwe*. This was probably due to the following labial *f*.

*knuffelen* ‘to push; grope; rub; cuddle’, also *knoffelen, knoeffelen* < \**knūb-*. Eastern dialects usually have a back vowel. In the standard language, only ‘cuddle’ is the actual meaning of the verb. Although *knuffelen* is already found in the early sixteenth century, *knoffelen* was competing with *knuffelen* in the literary language until at least 1650. In North Holland, both *knoffelen* and *knuffelen* occur (Boekenoogen 2004). With a long vowel, Kiliaan (1599) has *knuyffelen*.

*lof* ‘praise’ < \**luba-*, GEN.SG. MDu. *loves*, DAT.SG. *love*. Always with <o>. The same noun is found in compounds such as MDu. *befof* >> MoDu. *befoete* ‘promise’, MDu. *gehof* >> MoDu. *gefoste* ‘vows’, *oorhof* ‘leave, permission’, *verhof* ‘leave’.

*nooddruft* ‘indigence’ < \**naudi-purb-ti-* ‘poverty’. See § 10.4 on this word, where it is argued that \*-rft first became -rcht before vowel metathesis took place, giving East Flemish *noetdorch* in 1289. Early MDu. *noetdorft* and MoDu. *nooddruft* must be due to restoration of *f* on the model of the verb *dorven* ‘to need to’. Thus, the vowel first developed as *o* before *rC*, and is therefore irrelevant here. It is furthermore replaced by *noodorst* in modern dialects, e.g. in West Flemish (de Bo 1892: 653).

*offeren* ‘to sacrifice’, a loanword from Latin *offerre* (OS *offron*, OE *offrian*). The pervasive *o*-vocalism in all stages of Dutch could have been strengthened by the relatively transparent link with the Latin word.

*schoft* ‘shoulder blade of cows or horses’ < \**skufta-* (MLG *schuft*), cf. Kroonen 2013: 449. The word is hardly attested in texts before 1600. EWN suggests that the Dutch word was borrowed from Middle Low German, which is unlikely. The vocalism is not the same, and dialectal *schocht* (e.g., in Brabant and in part of the Flemish dialects) shows that the word shared in the Old Dutch change of *ft* > *cht*. Flemish has back vocalism in all dialects (WVD). Strikingly, however, most of Brabant and Limburg retains *f* in *schoft*, *schoeft*. Was its retention due to dissimilation (because of *sk* > *sch* in the initial position)? Or to analogy with *schof* ‘slide, bolt; work break’ which, with paragogic *-t*, has also become *schoft*?

*slof* ‘slow, languishing’ < \**sluba-*. Always with back vocalism. Generally *sloef* in Zealandish and Flemish (WZD, WVD).

*stof* ‘dust’ < \**stuba-*. According to the GTRP data, only Limburgian *s(j)töp* has a front vowel; see also the map ‘stof’ by van Ginneken in the Meertens Institute archives (*Kaartenbank*). The latter form continues a masculine noun \**stubbja-* and agrees with ODu. *stubbi*, MDu. *stubbe*, MLG (ge)*stubbe*, OHG *stuppi*, Goth. *stubjus*. The other Dutch dialects have (a back vowel variant of) *stof*, in which final *f* reflects earlier intervocalic \**v*.

*stof* ‘cloth’, a loanword from Old French *estophe*. Only back vowels occur in modern dialects (GTRP).

### 3. t, d

*bod* ‘offer’, *gebod* ‘order’ < \**buda-*. Always with <o>.

*bot* ‘blunt’, ‘kind of fish’ < \**butt-*. The adjective has a back vowel everywhere, but the fish is also called *but* in West Flemish (de Bo) and Zeeuws Flanders (WVD).

*bot* ‘bone; knot, bud’ < \**buttan-*. Generally spelled with <o>.

*bottel*, *buttel* ‘the fruit of certain bushes’, derived from MDu. *botte* ‘bud’. Teuthonista has *buttel*, and Kiliaan gives *bottel*, *buttel* as a word from Guelders. The word has short *o* in all attestations in PLAND, but this may well be due to

influence of the standard language. It appears that the word was not indigenous in western Dutch.

*botte, butte* ‘basket, barrel’ may be a loanword from Romance *\*butta*, though it has *i*-mutation in some West Germanic languages (OE *bytt*, MoHG *Bütte* and *Butte*). Kiliaan mentions *botte* next to *butte*. North Hollandish has *bodde* ‘fishing net’ (Boekenoogen 2004).

*dot, dod* ‘fool’, *bedodden* > *bedotten, bedutten* ‘to fool’; also *dutten* ‘to sleep briefly’. The Modern Dutch forms are probably due to contamination of two Middle Dutch roots, *dodden* ‘to fool’ and MDu. *dutten* ‘to rage’ beside *doten* ‘to be mad’. They go back to PGm. *\*dudd-* and *\*dutt-*, respectively, but it is unclear which Middle Dutch forms may have had *i*-mutation.

*genot* ‘enjoyment’ < *\*ga-nuta-*. Always with a back vowel.

*god* ‘god’ < *\*guda-*. Due to the obvious influence of church language, the fact that this word has a back vowel everywhere tells us nothing. But the interjection *gut!* ‘my!’, attested in Hollandish texts from the early seventeenth century onwards, is clearly the same word as *god*. This is especially clear from the expressions *by gut!* ‘by God!’ (Coster, Bredero), *begut!* (Huygens).

*lot* ‘lot’ (OE *hlot*) < *\*xluta-*. In Middle Dutch it is also found with lengthened vowel as *loet*, DAT.SG. *lote*. Always with a back vowel in all varieties of Dutch.

*modder, moder* ‘mud’ < *\*mudra-*. In modern dialects, *modder* is not attested with front vowels (GTRP), but Boekenoogen 2004 mentions *mudder* for North Holland. Flemish and Zealandish use heteronyms such as *moor(e)*, *moos(e)* and *goor(e)*.

*mot* ‘moth’ < *\*muþpan-/ōn-* (OE *moþpe*, MoHG *Motte*). Generally *mot* in Flanders, but *mat* in North Holland (Boekenoogen 2004: 321). No fronting is attested.

*otter* ‘otter’ < *\*utra-*. A back vowel in Flanders, Zealand and Holland and in all literary attestations.

*pot* ‘pot’ < Gallo-Romance *\*pottu*. All modern dialects have a short back vowel, mostly [ɔ] (GTRP).

*schot* ‘shot’, *geschot* ‘arrow, artillery’, MDu. *geschot*, GEN. *jscoets* < *\*ga-skuta-* (MLG *geschot*, *geschōt*, OHG *giscoz*). The word is closely cognate with *geschutte* < *\*gaskutja-*, see above. Probably, some of the <u>-forms of the latter entry represent unconditioned fronting of *geschot*, rather than reflexes of *geschutte*. See also s.v. *scheut* ‘pouring’ in § 15.2.3, A.3.

*geschot* ‘polder tax’ < *\*skuta-*. In Early Middle Dutch it is only found with <o> and lengthened <oe> in West Flanders and Zealand. The simplex *schot* ‘partition, tax’ has <o> in western Early Middle Dutch.

*slodderen* ‘to hang down (of clothes), spill’, a frequentative to *\*sloden*. The etymological connections are uncertain, but the reconstruction *\*sludd-* seems safe. Always with <o> in western Dutch.

*slot* ‘lock’ < \**sluta-*. All modern dialects have a short back vowel, except for the productive fronting area in Groningen (GTRP).

*snot* ‘snot, mucus’ < \**snutta(n)-*. Middle Dutch has *snot* (in all vocabularies) beside *snotte* (in Yperman’s *Cyrurgie* from 1351). The variant *snut* only occurs in Kiliaan’s *snutdoeck*, *snutteldoek* ‘handkerchief’, which may have been influenced by the verb *snuiten*. Modern Zealandish has *snot(te)*, as do Flemish and North Hollandish.

*spot* ‘spot; mockery’ < \**sputt-*. See de Vaan 2014a for the etymological connection of the synchronically different lexemes MDu. *spot* ‘mockery’ (OHG OS *spot*, OIc. *spott* n.) and Flemish *spotte* ‘stain, spot’ (MoE *spot*, OIc. *spotti* ‘small part’). Within the nominal framework proposed by Kroonen 2011: 267–96, we can reconstruct a PGm. *n*-stem with NOM.SG. \**spūþō*, GEN.SG. \**sputtaz*, from which Dutch generalized the intervocalic \*-tt-. The *a*-stem was secondarily derived from the GEN. SG. \**sputtaz* or the GEN.PL. \**sputtan* of the original *n*-stem, cf. Kroonen 2011: 60. The word *spot* ‘stain’ survives in Zeeuws Flanders *spot* ‘humid stain in clothing’ (WZD 916). No <u>-forms are attested.

*strot* ‘throat’ < \**strut(t)ō(n)-*. The different Germanic variants were derived from an *n*-stem paradigm NOM.SG. \**strutō*, GEN.SG. \**struttaz* (Kroonen 2011: 295–6). Many dialects, particularly in Brabant but also in Zealand, have a lengthened vowel in open syllable: *strote*, *stroot*. In Flanders, one would expect metathesis into *storte*, but this lexeme has been replaced by *keel* in nearly all dialects (Belemans/Goossens 2000: 216).

*vlot* ‘raft’, ‘quick’ < \**fluta-*. Only <o>-vocalism.

*zot* ‘mad’, a loanword from Old French *sot*. This is a southern Dutch word which replaced earlier *door* (G. *Tor*) < \**dauza-* which is retained in some areas. Only *o*-vocalism is attested.

*zodde* ‘wetland’ < \**suddō-* ‘broth’ (MLG *sudde* ‘moor’, MoWF *sodde*, *sodze* ‘moorish ground’, MoHG *sutte* ‘pool’). The variant *sudde* is found in Kiliaan and with Early Modern Dutch authors from Holland, and *rietzudde* ‘rushes surrounding a piece of land’ in North Hollandish (Boekenoogen 2004).

#### 4. s(s)

*bos* ‘bush’ beside *bus* < \**buski-/an-*. Early MDu. *busc(h)*, probably with a front vowel, is found in West Flanders and Holland, cf. Berteloot 1984a, Map 62. According to Map 1 in Taeldeman 1971: 259, the modern dialects of French Flanders and almost all of West Flanders have *bus*. In Zealand, WZD gives mostly *bos* but *bus* in Zuid-Beveland. To the east of this area, we find *bos*. This distribution is confirmed by the GTRP data, but Boekenoogen 2004 also claims co-occurrence of *bos* and *bus* in North Holland.

*drost, drossaard* ‘steward’ < ODu. \**druxti-sātan-* < WGm. \**druxti-sēt-an-*. Early Middle Dutch forms are Flemish and Hollandish *drussate*, Brabantish *drossate*, Limburgian *dru/ossete*. Syncope led to the modern standard form *droste* > *drost*. Where apocope preceded syncope (i.e., *drossate* > *drossat*), possibly in the

nominative and accusative singular, folk etymology replaced the suffix by *-aard* after 1500. No modern <u>-forms are attested for *drost*.

*dus* ‘thus’ < WGm. \**p̥us* (OS *thus*, OFri. *thus*, OE *pus*). Early Middle Dutch has (*al*)*dus* in Holland, Flanders and, occasionally, in eastern dialects, but systematically (*al*)*dos* in West Brabant. Although the latter form may actually represent a front vowel, the Germanic cognates show no sign of *i*-mutation. It is therefore more likely that western *dus* is due to unconditioned fronting of an original back vowel.

*kosten* ‘to cost’ from Romance *costāre*. No forms with a front rounded vowel are attested in literary Dutch. North Hollandish *kusten* ‘to settle the bill’ (Boekenoogen 2004, Pannekeet 1984) may be denominial to *kust* ‘cost, bill’ in the same dialect.

*kust* ‘coast’ from Old French *coste* ‘side; region’, compare English *coast*. MDu. has *coste*, Kiliaan *koste*, *kuste*, but we always find *kust* in literary texts after 1500. West Flemish dialects have *kuste*.

*los* ‘lynx’ < \**luxsa-*. The word is hardly attested in Middle Dutch. In Modern Dutch, we find forms such as *losch*, *lochts* and plural *losschen*, but the word is not attested widely enough to draw any conclusions for the vocalism.

*lust* ‘lust’ < \**lustu-*. Whether Early MDu. *lust* beside *lost* (Limburg, 1240) and WBrab. *lost* reflect a form without umlaut is uncertain. The occurrences of *lost* in various Brabantish and Hollandish texts from the fifteenth and sixteenth centuries (MNW) strongly suggest a back vowel /ɔ/. Kiliaan has *lost* beside *lust*. WNT mentions a number of authors with *lost* in the sixteenth and seventeenth century, though their regional appurtenance is not always clear. In any case, it seems that non-umlauted *lost* may have been the regular inland Dutch form, whereas *lust* arose in coastal Dutch, either from unconditioned fronting, or taking its *u* from *lusten* ‘to lust, please’ < \**lustjan*.

*mossel* ‘mussel’ beside *mussel*, from Romance \**muscula* ‘little mouse’. In modern dialects, French Flanders and western West Flanders have /œ/ (GTRP; Taeldeman 1971: 259, Map 1; FAND I, Map 90).

*mos* ‘moss’ < \**musa(n)-*. We find a back vowel in all dialects and all periods of Dutch.

*most* ‘must’ < Latin *mustum*. Always *most* in coastal Dutch texts and dialects. The same goes for *mosterd* ‘musterd’, a borrowing from Old French *mostarde*.

*os* ‘ox’, MDu. *osse* < PGm. \**uxsan-*. No front vowels are attested in modern dialects (GTRP).

*post* ‘post, pole’, MDu. *post*, a loanword from Latin *postis*. Probably borrowed as an *a*-stem, as there is no trace of *i*-mutation anywhere in West Germanic. All Dutch forms have a back vowel.

*vos* ‘fox’ < \**fuxsa-* (OHG *fuhs*, OS *fohs*, OE *fox*). Always <o> in all stages of the literary language. Also /o/ or /ɔ/ in all dialects. The assimilation of \**x*s to *ss*, which took place in this word, can be dated to ca. 1000 CE for Flemish.

## 5. k,g,ch

(*be*)*drog* ‘deceit’ < \**druga-*, MDu. *gedrog* ‘monster’. No *u*-forms are attested.

*blok* ‘block’ < \**blukka-*. No fronted forms are attested.

*bochel* ‘hump’ < \**bugla-/ō-*. First attested as *boechel* with /u/ in Kiliaan’s dictionary (1599). Spelling variants include *buchel* (Oudaan), *buchgel* (Heinsius, 1695), *bugchel* (Comenius, *Deure der Talen*, 1642), all in books edited in Amsterdam. The noun seems to be absent from Flemish and Zealandish, but these dialects have the verb *buchelen*, *buggelen* ‘to cough constantly; to do hard work, toil’ (WZD 147–48; de Bo 1892: 170), which may well be derived from *buchel* ‘hunch-back’. This verb is already attested in Kiliaan, viz. as *buchelen*, *boechelen*, *buechelen*.

*bok* ‘he-goat’ beside *buk* < \**bukka-*. Early MDu. *buc* in Flanders and West Brabant. For modern dialects, see Taeldeman 1971: 266, Map 8 and *FAND I*, Map 93. *Buk* has a front rounded vowel in West Flanders and most of French Flanders, and used to have *u* in an adjacent small part of East Flanders as well. In the *GTRP* dataset, *buk* has been ousted from East Flanders.

*brok* ‘chunk’ < \**bruk(k)a(n)-*. West Flemish *brokke*. No fronted forms attested.

*juk* ‘yoke’ < \**juka-* is a Hollandish form beside *jok* in other dialects, such as Flemish and Zealandish.

*klok* ‘clock’, MDu. *clocke*, is a loanword from Old Irish *clocc*, which may have entered the continental Germanic languages via Old English. The *GTRP* database shows a short back vowel /ɔ/ or /o/ in all Dutch dialects.

*kok* ‘cook’ < WGm. \**koka-* < Latin *cocus*. Some dialects have generalized *kook* from the oblique case forms. No front vocalism was found.

*log* ‘slow, plump’ < \**lugga-*. The adjective is only attested in Modern Dutch. Theoretically, the toponym *Lugghevorde* in West Flanders in the thirteenth century could also belong here, as could Flemish *lugge*, *logge* ‘disease of grain’ (de Bo 1892: 572; first attested in 1700 as *lugge* in a spell against the rot in wheat), although this remains uncertain for semantic reasons. Kiliaan and Plantin have the verb *lugg(h)en* ‘to be lazy, to lug’. If the verb was primary, then the *u*-vocalism in the adjective might have been taken from the verb. The verb itself could have *i*-mutation (if from \**luggjan-*) or unconditioned fronting.

*lok* ‘tuft, lock (of hair)’ < \**lukka-* (Kroonen 2013: 343) beside \**luka-*. MDu. *locke*, dial. also *loke*. No fronted forms appear.

*lokken* ‘to entice’ < \**lukkōn-*. No front-vowel forms occur.

*nog* ‘still, yet’ < WGm. \**nux*. No front vowels are attested. Of course, the unstressed status which this word often has makes it conceivable that its *o* would develop differently from a stressed vowel.

*plug* ‘prop, peg’ < \**pluggan-* (MLG *plugge*). Groningen has *plog(ge)* without *i*-mutation. The word *plugg(h)e* in Plantin and Kiliaan is followed by general literary *plug* in Modern Dutch texts. West Flemish also has *plugge* with a front vowel

(de Bo 1892), whereas *plogge* is reported for Zierikzee in Zealand by WNT. North Hollandish *pleghout* ‘wooden peg in a plane’ (Boekenoogen 2004) looks like a local unrounded variant of \**plughout*.

*pluk* ‘bundle’, *pluk* ‘tuft’. *Pluk* is derived from the verb *plukken* ‘to pick’. *Teuthonista’s plock*, the first attestation in Dutch, is congruent with the preterite *plocht* which the verb often has in modern southeastern Dutch. Zealandish *plok(ke)* has the same vowel as the verb does in parts of Zealand and Holland.

*pok* ‘blotch, blister’ < \**pukkō-* and \**pukka-* (MLG *pokke*, Early MoHG *pfoche* ‘botch’ vs. MHG *pfoch* ‘purse’, OE *pocca* ‘purse’ vs. *pocc* ‘botch’). Middle Dutch *pocke*, Kilian *pocke*, *pockele*, and *pok* in all Modern Dutch literature. In South Brabantish dialects also *poek*. In the meaning ‘small child, small animal’, the form *puk* is widespread in Hollandish.

*pukkel* ‘pimple’, *pokkel* ‘hump’, derived from MDu. *pocke* ‘blotch, blister’ < \**pukkVla-* (MoHG *Pickel*). The earliest Dutch attestation is from 1567. Kilian has “*puckel* i.e. *pocket*.” *Pokkel* ‘hump’ is known in all dialects, including all eastern ones, and must therefore be reconstructed without *i*-mutation factor. North Hollandish has *pokkel* (Boekenoogen 2004).

*rog* ‘ray’ (OE *rohha*) < \**ruggō(n)-*, compare the verb \**ruck/ggōn-* ‘to move to and fro, rock’ as reconstructed by Kroonen 2013: 417. MDu. *rogghe*, Kilian *roch*, modern Flemish dialects *roch(e)*, *rog(ge)*. No fronting is attested at any stage of Dutch.

*rogge* ‘rye’ < \**ruggan-*, which existed beside PGm. \**rugi-* (whence MoE *rye*), see Kroonen 2013: 416–7. Many dialects have adopted the Standard Dutch word *rogge*. Where this does not seem to be the case, fronting is found in French Flanders and the northwestern half of West Flanders in /roehə/, see Taeldeman 1971: 262, Map 6. The province of Antwerp sporadically has fronting to /røyə/. As against regularly apocopated /rɔk/ in North Limburg, the south of Belgian Limburg has /roegə/ with *i*-mutation and final schwa. Kroonen mentions Brabant *reugel* ‘rye’ < \**rugila-* (*WBD*) which would confirm the erstwhile existence of \**rugi-* on Dutch soil.

*rok* ‘skirt’ < \**rukka-*. Modern dialects have a back vowel everywhere (except occasionally in Drente; *GTRP*).

*schokken* ‘to rock’ < \**skukkōn-* (Kroonen 2013: 450). No front vowels are attested.

*slok* ‘sip, gulp’, deverbal to *slokken* ‘to swallow’ < \**slukkōn-*. All dialects have a back vowel (with a few local exceptions), see the *GTRP* database.

*spinrokken* ‘distaff’, MDu. (*spin*)*rock(e)*, Early MoDu. *spinrock* (OHG *rocko*, MoHG *Rocken*). Probable from WGm. \**rukkan-* ‘rocker’ to the verb \**rukkōn-* ‘to rock’. The word has practically died out in Modern Dutch. No front vowel forms are attested.

*sok* ‘sock’, MDu. *socke*, a loanword from Latin *soccus*. No fronted forms occur in the western dialects.

*stok* ‘stick’ < \**stukka-*. All modern dialects have a back vowel /o/ or /ɔ/ (*GTRP*).

*trog* ‘trough’ < \**truga-* (Kroonen 2013: 523). MDu. *trog, troch*, PL. *troghen* with /o:/-. The standard plural is *trodden*, but we find a singular *troog* in Limburg. No front vowels occur in the modern dialects.

*vlok* ‘flake’, MDu. *vlocke* < \**flukkan-*. No front vowels are attested.

*wrok* ‘grudge’ either directly reflects WGm. \**wruka-* or is a more recent derivative to *wreken* ‘to avenge’. It is only attested from 1550 onwards, yet its appearance in proverbs and the existence of MLG *wrok, wruk* ‘hatred, grudge’ suggest that it is older. No front vowels are attested.

*zog* ‘mother’s milk; wake’ < \**suga-*, a productive derivative of *zogen* ‘to suck’. In oblique case forms we find MDu. *soghe* with open syllable lengthening. There are no variants with front vowels.

## 6. cht

*bocht* ‘bend, curve; enclosure’ < \**buxti-* (OE *byht*, MoE *bight*). The only form attested before 1500 is the Old Dutch toponym *Buhtene* (Limburg). Modern Dutch mostly has a back vowel but several West Flemish dialects and Zealandish have *bucht* (WZD).

*bocht* ‘dirt, bad weeds, etc.’. If MHG *bāht* n. is the oldest form, we can reconstruct PGm. \**banxta-*, with a development \**bōxt* > *bocht* in Dutch as in *brocht, bracht* ‘brought’ (Franck & van Wijk 1912). Yet no good root etymology has been proposed for \**banxta-*. One could think of \**bī-anxta-* (compare \**būtan* from \**bī-utan* and similar formations), which could be a derivative of \**ank-* ‘complain’ or \**ankw-* ‘smear’. The word is given as *bucht* by de Bo (1892) and by several local dictionaries from Flanders, but it also occurs with a fronted vowel in eastern dialects, e.g. in Tienen (SE-Brabant) *beucht*. The latter seems to be an original plural; compare *bōcht* ‘rubbish’ in the town of Weert, a plural form (Hermans et al. 1998: 47). Cornelissen & Vervliet (1899–1906) give *bucht, beucht, boecht* for Antwerp and the western Campine. In Limburg and southern Guelders, we generally find an *o*-vowel in the meaning ‘bad weeds’ (PLAND s.v. ‘onkruid’). If MoDu. *bocht* ‘money, treasure; stuff’ is the same word, note that it is found as *bucht* already in Early Modern Dutch, e.g. with Anna Bijns (1548) and De Dene (1560), see WNT s.v. *bocht-III*.

*dochter* ‘daughter’ < \**duxtar-*. All modern dialects have a back vowel (GTRP).

*kocht* ‘bought’ < \**kōxta* < \**kōfta* has a back vowel in all modern dialects (GTRP).

*lucht, locht* ‘air’ < \**luftu-* (MoWF *loft*, OE *lyft*, MoE *lift*). Early Middle Dutch shows *o* in Brabant (10x) and Limburg (2x) but only *u* in West Flanders (81x). As Map 31 shows, modern eastern and south-central dialects to a large extent still have the back vowel /ɔ/, /o/ or /u/, viz. Antwerp, Vlaams Brabant, Limburg, Achterhoek, Overijssel, Drente and southern Groningen. Within the western and central area with a predominant front vowel, two relic areas with /ɔ/ can be distinguished, viz. northern Zealand and northern South Holland plus southern North Holland.



Map 31. Back vowel in *lucht* according to the GTRP dataset

*ochtend* ‘morning’ beside *uchtend* < \*ūxt(w)ō-. Early MDu. *nuhte* (Cleves/Guelders), *nuchtens* ‘in the morning’ (Bruges). Kiliaan (1599) calls *nuchte(n)s* Hollandish, Flemish and Guelrish. Modern Flemish has *nuchtend* or another variant with a front rounded vowel (de Bo 1892; WZD), whereas northern Zealand has (*n*)och(*t*) *end* (WZD).

*tocht* ‘journey; draught’, *tucht* ‘discipline’ < \*tuxti- ‘pulling’ (see § 7.2.1). In Modern Dutch, *tocht* and *tucht* have undergone semantic specialization: *tucht* has come to mean ‘discipline’, whereas *tocht* continues literal meanings that refer to ‘pulling’ (‘journey’, ‘draught’) or has become opaque (as in *lijftocht* ‘subsistence’). The meaning ‘discipline’ seems to have been influenced by German Bible translations (thus EWN), but the *u*-vocalism may have been supported by *tuchtig* ‘virtuous’. In the thirteenth century, there is a clear regional difference between *tucht* in Flanders versus *tocht* elsewhere, particularly also in Holland. Compare, for instance, the attestations of *meentocht* ‘community’ (-*tucht* in Flanders), *lijftocht* (-*tucht* in Ghent, -*tocht* elsewhere), *ademtocht* ‘breath’ (with *u* in WFla. but *o* in EBrab.) and *borgtocht* ‘bail’ (*u* in WFla., *o* in Holland). The consistent *o*-spellings in eastern dialects throughout the Middle Dutch period suggest that there was no *i*-mutation of this word. Hence, *tucht* in Flanders may be explained from unconditioned fronting of \**u*. Possibly, then, the survival of *tucht* as ‘discipline’ in Modern Dutch may lie in the regional origin of the works in which this term was spread in the sixteenth century.

*vlucht* ‘flight’ < \*fluxti- ‘fleeing; flying’ (ODu. *fluht*, OFri. *flecht*, ME *flyght*). The single Early Middle Dutch instance of unrounding in *vlecht* (*Liege Diatessaron*,

1291–1300) is tentatively regarded as a spelling error for *vlucht* by VMNW. In modern dialects, *vlocht* is found in the Achterhoek. The fronted vowel is spread more widely than in some other stems in \*-xti-, in particular, also in eastern dialects which would have regular *i*-mutation; but here *vlucht* may have been influenced by the verb *vluchten* ‘to flee’ < \**fluxtjan*-.

*vocht(e)* ‘fought’ (<< earlier \**vachte*) has a back vowel in all modern dialects (GTRP). *zucht* ‘disease’ < \**suxti-* (OS *suht*, OHG *suht*, OE *suht*; but OFri. *sechte*, *siochte*, MoWF *sjocht* < \**seuxt*-). In the thirteenth century, the Life of Lutgart ms. K (WBrab.) writes *socht* but *Der Natueren Bloeme* ms. D (WFla.) consistently has *sucht*. The Gloss. *Bern.* (Limb., 1240) has *blutsogt* ‘dissintheria’, *hantsoech* ‘cyragra’ and *uoet sogt* ‘podagra’. Whereas the *o*-spellings from Brabant and Limburg are ambiguous, for Flanders we may assume a front vowel /œ/. In Modern Dutch after 1600, the spelling *s/zucht* prevails, the vocalism of which may have been influenced by the verb *zuchten* ‘to sigh’. In the modern language, *zucht* ‘disease’ has been replaced by its synonym *ziekte*.

## 8. mC and nC

Before *m*:

*brommen* ‘to murmur’ < \**brumm-*. Unattested in Middle Dutch. WNT mentions that the word previously also occurred as *brummen*, but the attestations are from eastern Dutch and may therefore represent a back vowel, viz. Theuthonista (1477) *brummen*.

*dom* ‘dumb, stupid’ < PGm. \**dumba-*. MDu. *domp*, inflected *domme*, MoDu. *dom*. Always a back vowel in modern dialects, with /u/ in the Brabantish area which frequently has /u/ before nasals where Standard Dutch has /ɔ/.

*drommen, drummen* ‘to throng’. MDu. mostly has *dromen* ‘to throng, insist, chase’, also *drommen*, with a derivative *drummere* ‘pilar’ in Ghent. Early MoDu. *dromen* with a long vowel stands next to *drommen* (which is Flemish, according to Kiliaan) and *drummen*, mainly in Flemish and Hollandish sources. De Bo 1892 gives the verb as *drummen*, WZD has *drummen* for Walcheren and Zeeuws Flanders and *drommen* elsewhere. Most likely, *drommen* reflects shortening of MDu. /ɔ:/ before *m* (see § 17.2.3 below), followed by fronting in Flanders to *drummen*. MDu. *dromen* has been derived from \**prumi-* ‘crowd’ (see s.v. *drom* in § 15.3.2, A.7), but it is more attractive to connect OS *drōm* ‘mirth, noise’, OE *drēam* ‘joy, jubilation’, MDu. *droom* ‘crowd’ < \**drauma-*. This word may derive from PGm. \**draugma-* ‘host, group’ to the verb \**dreugan* ‘to join a band, do a duty’ (Kroonen 2013: 102, Seebold 1970: 167). Whether *dromen* ‘to throng’ continues \**u* or \**au* could be decided by modern dialect variants, but the word is not very reliably described. For West Flemish, de Bo

1892 lists *drum*, *drom*, *druim*, *droom*, *dreum* for ‘a dense crowd’, of which the variants *druim* and *dreum* are more compatible with *\*drauma-*. In any case, the word cannot be used as certain evidence for the reflex of short *\*u*.

*gom* ‘gum’ from French *gomme*. The *GTRP* database shows an interesting distribution. A front rounded vowel is found in many of the northeastern dialects, in Limburg and in East Brabant, but only down to the state boundary with Belgium. In Belgium, all dialects have a back vowel. No doubt this distribution was influenced by the presence of *gum* in Standard Dutch of the Netherlands versus *gom* in Belgium. It is therefore striking that almost all of the western dialects of the Netherlands have a back vowel too, viz. Zealand, Holland and Utrecht. Only here and there do we find *gum*.

*kom* ‘bowl, valley’ < *\*kumbō-*. No front vowels in modern dialects (*GTRP*).

*krom* ‘crooked’ beside *krum* < PGm. *\*krumba-* Fronting is rare in historical texts. In modern dialects, the usual form is /krom/. Only a small area in southwestern Brabant and adjacent southeastern Flanders has *krum*, *kreum*, with unrounding to *krim* in the productively unrounding areas (Taeldeman 1971: 267 Map 16; *GTRP* database; *FAND I*, Map 104).

*lomp* ‘rag; ‘rude, clumsy’ < *\*lumpa-* ‘chunk, piece’. It has a back vowel in all regions, with high /u/ in South Brabant, southern and western Antwerp, and *passim* in West Flanders (*GTRP*).

*nummer* ‘number’, a loanword from Old French *nombre*. MDu. *nomber* and *nommer*, Early MoDu. also *nomber*. The first attestation of *nummer* dates from 1697 (van Yk, *De Nederlandsche Scheepsbouwkonst*, Delft). Only in the course of the nineteenth century is *nommer* gradually replaced by *nummer* in literary texts (WNT). In modern dialects, the back vowel is still usual in the south: *noember* in South and West Antwerp, *noemer* in all traditional Zealandish dialects (WZD). Limburgian generally has *nómmer*. In Flanders, the word has been modified according to later French forms, giving *numer* or *noemeroo*. This means that *nummer* must have arisen in Holland or North Brabant.

*pomp* ‘pump’, probably a loanword from French, has no front vowel in any modern dialect. A high back vowel /u/ is found in South Brabant and in some West Flemish dialects (*GTRP*).

*som* ‘sum’, a loanword from French *somme*. It has back vowel in all modern dialects (*GTRP*).

MDu. *som* ‘some’ beside *sum*, MoDu. *sommige* ‘some’, *soms* ‘sometimes’ < PGm. *\*suma-* ‘some’. Early MDu. *sum(-)* is found sporadically in Flanders and Brabant. No *u*-forms occur in Modern Dutch.

*stom* ‘mute; stupid’ < *\*stumma-* ‘mute’ always has a back vowel, usually between /ɔ/ and /u/, but /u/ in Vlaams-Brabant and southern Antwerp.

*stomp* ‘blunt’ < *\*stumpa-*. No front vowels are attested.

Before *n(n)*:

*begon(-de, -ste)* ‘started’, preterite of *beginnen*. The GTRP database shows a front rounded vowel in the northeast (Overijssel, Drente, parts of Groningen) and in French and southwest Flanders. The latter dialects have *behu(n)ste* or *behunde*, whereas the northeast shows *begunde*, *begunne* and *begun*. Most of these dialects, however, also have /œ/ in the present of ‘to start’. Hence, the preterite vocalism does not necessarily stem from fronting of \**o*.

*non* ‘nun’, a loanword from Old French *nonne*. For Zealand, WZD gives *nonne*, whereas many West Flemish dialects have *nunne* (also in *nunnekouse* ‘clavicular’ in de Bo 1892). In Leiden there is the *Nunnen brugghe* ‘Nuns’ bridge’ (1641). For North Holland, Boekenoogen (2004: 348) mentions that both *non* and *nun* occur.

*ton* ‘barrel’, a loanword from Old French *tonne* or a similar Romance word. Old forms are Late ODu. *tunna* and the diminutive *tunnekin* (WFla., 1295). In modern dialects, we find a fronted vowel in French and West Flanders, on Walcheren, Beveland, Duiveland and on Goedereede (Taeldeman 1971: 190, 261, Map 3; GTRP). The other dialects all have a back vowel.

*zon* ‘sun’ beside *zun(ne)* < \**sunnō(n)-*. Early Middle Dutch shows only one *u*-spelling in West Flanders as against usual *zonne*. In modern dialects, *zunne* is found throughout French and West Flanders, and in central and northern Zealand.

Before *nT*:

*blond* ‘blond’ < Old French *blond*, *blund*. Old Dutch *Blunde* (PN), MDu. *blont*, *blonde*. No front vowel forms in modern dialects.

*bond* ‘bond, bundle’ < \**bundi-*. No front vowels are attested.

*donder* ‘thunder’ < \**punra-*, *donderdag* ‘Thursday’. Early MDu. *dunredach* occurs in West Flanders, cf. Berteloot 1984a, Map 143. For ‘thunder’ in modern dialects, GTRP shows a front rounded vowel in French and West Flanders and central parts of Zealand, as well as in Groningen and northern Drente. For Flanders see also Taeldeman 1971: 261, Map 3. In ‘Thursday’, the fronting is distributed in modern coastal Dutch dialects in the same way as in *donder*.

(*ge*)*zond* ‘healthy’ < \**(ga-)sunda-* ‘being, alive’. No front vowel forms are attested.

*grond* ‘ground’ < \**grundu-* (Kroonen 2013: 192). We only find back vowels.

*gunst*, southern Dutch *jonst* ‘favour’ < \**ga-unsti-*. Early MDu. *gunst* (Limburg), *ghonste* (Brabant), and *jo(e)nst(e)* (in western texts). In CRM14, *gonst(e)* is found in Overijssel, East Brabant and Limburg, *jonste* in IJsselstein, Ghent and Brussels, and *gunst(e)* in some towns in Central and East Brabant

and Southwest Limburg. In modern dialects, West Flemish has *junste* or *jeunste*, East Flemish *jonste*. Obviously, the noun may have been influenced by the verb ‘to grant’, which is still *junnen, jeunen* in West Flemish. For northern g- in *gunst*, this influence is even clearer, as its g- is due to restoration of \*ge- (see § 9.3 for \*ga- > \*je-). The simplex is reflected in MDu. *onst(e)* which was lost from Modern Dutch.

*hond* ‘dog’ < \*xunda-. No front vowels occur in Modern Dutch. French and West Flanders generally have /u/ (GTRP).

*honderd* < \*xund-rada- ‘row of hundred’. The Early Middle Dutch instances of *hun-* in eastern and northern texts may indicate /u/, cf. Berteloot 1984a, Map 68. In modern dialects, we find *ondert* or (*h)oendert* in Zealand and West Flanders. Only back vowels are found.

*kunst*, MDu. *const(e)* ‘art’ < \*kunsti-. MDu. o and MoDu. u can be explained from influence of the verb *connen* > *kunnen*. Hence, the distribution in this word does not provide reliable evidence for the Old Dutch reflexes of \*u.  
*mond* ‘mouth’ < \*munþa-. No front vowels in modern dialects (GTRP).

*plunderen* ‘to pillage’ beside *plonderen* < \*plund- (cf. MDu. *plundware*, MLG *plunde* ‘small furniture; rags’). West Flemish has *plunteren* (de Bo 1892). Kiliaan (1599) has *plunder, plonder* ‘rags, small furniture’ and *plunderen* beside *plonderen* ‘to pillage’. For ‘rags’, we find a sg. *plun* in North Holland (already in the 18th century, e.g. in *plunzak* ‘bag for clothes’ in 1730) and *ploendeke, plongske* ‘ragged hat’ in West Flanders. In the western Dutch literature of the seventeenth century, *plonder(en)* is the most frequent variant, replaced by *plunder(en)* only after 1800. It appears that front vocalism arose in several places independently.

*rond* ‘round’ from French *ronde*. It has a back vowel in all modern dialects, with [u] in French and West Flanders (GTRP).

*slons* ‘slut’, no clear etymology. Maybe it is cognate with Modern Swedish (dial.) *slunta* ‘to loiter’, MoHG (dial.) *schlunzen* ‘id.’. The Middle Dutch form would have been \**slonze*. French and West Flanders and some western dialects of East Flanders have [slo:(n)sə], which shows unconditioned vowel fronting (GTRP).

*stond* ‘stood’. In 1641, we find *stunt* in a description of the town of Leiden; otherwise, the word generally has a back vowel.

*stonde* ‘time, moment’ < \*stundō- (MoHG *Stunde* ‘hour’). Early MDu. *stonde* and *stont*, eastern *stunt* with /u/. After ca. 1650, Early MoDu. *stont* disappears from active usage except in literary senses such as *morgenstond* ‘early morning’.

*zondag* ‘Sunday’. Fronting is found in the same Flemish areas as with the simplex *zon* ‘sun’, but not in Zealand (GTRP). We also find *zundag* with a front vowel in archaic South Holland dialects and in large parts of North Holland,

which have a back vowel in ‘sun’. This accords well with the front (but lengthened) vowel of Bredero’s *Seundaaghs* ‘on Sundays’. See also *FAND I*, Map 100.

*zonder* ‘without; except’ < \**sundar*. Only three South Holland dialects, viz. De Lier, Gouderak and Ameide, show a front rounded vowel in the *GTRP* database.

Before *nK*:

*donker* ‘dark’ < \**dunkra-* (Kroonen 2013: 119). No fronted realizations in the *GTRP* database.

*dronk* ‘drink’ < \**drunki-*. Only back vowels are attested.

*dronken* ‘drunk’ < \**drunkana-*. Early Middle Dutch has *drunken* in Limburg and Brabant versus *dronkin* in Flanders. Maybe the original participle was replaced by an *in*-adjective in Flanders. For the vowel in the past participle ‘drunk’ in Flanders, see Taeldeman 1971: 268, Map 18, which shows [u] in West Flanders and Brabant versus [u] in East Flanders. No front vowels are attested.

*honger* ‘hunger’ < \**xungru-*. No front vowels in Modern Dutch, generally /u/ in French and West Flanders (*GTRP*).

*jong* ‘young’ < \**junga-*. In eastern Early Middle Dutch we have *jung*, cf. Berteloot 1984a, Map 70. No front vowels occur in modern dialects, and French and West Flanders generally have /u/ (*GTRP*).

*tong* ‘tongue’ < \**tungō(n)-*. All modern dialects have a back vowel (*GTRP*).

*vonk* ‘spark’ < \**funkan-* m., see Kroonen 2013: 160. Generally *vonke* in Middle Dutch and *vonk* in the modern literary language. The dialects of Brabant and Limburg show *vonk* or *voenk* (*WBD*, *WLD*), whereas in Zealandish, *voenke* is being replaced by *vonke* (*WZD*). In Flanders, *vonk(e)* has largely been replaced by heteronyms.

## 9. l(C)

*bol* ‘globe’ < \**bullan-* < \**bulnan-*. The *GTRP* database has no front vowel occurrences.

*bul* ‘bull’ < \**bul(l)an-* (Kroonen 2013: 83). Already attested in the twelfth century in the Flemish toponyms *Bulleskamp* and *Bulscamp*. The PN *Ihan die bul* in Saaftinge (EFla.) in 1293 may well have a front vowel. Kiliaan has *bolle* and *bulle*. Early Modern Dutch literature from both Holland and Flanders generally has *bul(le)*. For modern dialects, Map 1.15 of *TNZN* gives the variants of ‘male bovine’. A reflex of \**bul(l)an-* is found in most of the northern provinces. This is *bul* in South and North Holland (the front vowel is confirmed for earlier centuries by toponyms, see Boekenoogen 2004: 79), the island of Texel and all of Utrecht, and *bol* or *bolle* in all dialects east of the Veluwe and north of the Rhine. Fryslân, too, has *bolle*. The absence of data from Zealand and Flanders on the map is strange. *WZD* 148 gives *bul* ‘bull’ for Zuid-Beveland, western Zeeuws Flanders and Goeree, and

metaphoric *bul* ‘a strong guy’ for all of Zealandish. In West Flemish, *bullig* refers to a cow that has become infertile and may be vicious like a bull (de Bo 1892: 174).

MDu. *abolghe* ‘ire, wrath’ < \*ā-*bulgī*- . In Old High German, the neuter *ābulgi* and the feminine *ābulgī* are both attested (Braune & Reiffenstein 2004 §201 Anm.1). In the thirteenth century, MDu. *abolghe* is only attested in literary texts from Brabant, and, in at least part of the cases, as a feminine. In later Middle Dutch we always find the spelling with *o*, and MoDu. *oubollig* ‘droll, corny’, which has developed out of Early MoDu. *abolgig*, also always has *o*. If it was an original *i*-stem, *i*-mutation is expected in all forms of the paradigm. Since that does not seem to be the case, the noun may have shifted to a different stem type, or its vocalism was influenced by the verb ODu. *irbelgan* ‘to get angry’ (WPs.).

From the same root \**belg-* is derived MoDu. *verbolgen* ‘angry’, the strong participle of MDu. *belgen* ‘to swell, make angry’. Its participle *verbulgen* is attested in the play *Josep ende Maria* by the Haarlem rhetoric chamber of the sixteenth century. A derived verb is MDu. *bulgen* ‘to swell’ < \**bulgjan*- , with the noun *bulge* ‘a swelling’. Both words are only attested in Hollandish literature, but *bulghen* (Jan van Boendale, Antwerp, 1330) ‘to expectorate’ may well be the same verb as ‘to swell’. In the meaning ‘billow’, Kiliaan calls *bulghe*, *bolghe* Frisian and Saxon words. The verb is attested in modern North Hollandish as *bulge* ‘to bulge’, and in modern Zealandish *bulgen* (PL.) refer to the intestines of animals (WZD).

*bolster* ‘husk’ in Middle Dutch also *bouster*, beside *bulster* ‘pallet, straw mattress’ < \**bulstra(n)*- (cf. MoHG *Polster* ‘pillow’; Kroonen 2013: 84). The variants *bolster* and *bulster* were both known to Kiliaan, who treats *bolster* as the normal form and *bulster* as a variant. In Early Modern Dutch literature, there already seems to be a semantic differentiation between *bolster* ‘husk’ and *bulster* ‘pallet’ (according to the presentation in WNT), but all attestations with *u* are found in Hollandish authors whereas no regional restriction applies to *bolster*. *Bulster* ‘pallet’ with a front vowel is also found in West Flemish dialects (de Bo 1892: 175), and the adjective ‘puffy, bloated’ has both variants *bulsterachtig* and *bolsterachtig* according to de Bo (1892: 142). It follows that fronting was not restricted to Hollandish. The word is not mentioned in dictionaries of modern North Hollandish. The verb *bolsteren* ‘to peel, remove the husk’ is found in Kiliaan, and also in modern Zealandish *bolsteren* ‘to weed’ (WZD).

*dol* ‘mad’ beside *dul* < \**dula-* (OE *dol*, OHG *tol*, MoHG *toll*). The adjective generally has a front vowel in modern dialects of French and West Flanders, northern East Flanders, and in some dialects of southern Zealand. All central, northern and eastern dialects have a (usually short) back vowel, with the exception of Limburg, where a front vowel /ø/, sometimes lengthened to /ø:/, is concentrated in the east and south of the area. The vowel lengthening in the adjective is normal for these Limburgian dialects (it was generalized from the oblique case forms of the paradigm). The fronting, however, is surprising. The lengthening in Limburg precludes an stem variant

\**dulja-*, which would have always had a short vowel. The same argument can be made against an explanation of the front vowel as taken from the Limburgian verb *verdullen* ‘to dazzle’. Dialectal /dø:l/- may alternatively reflect \**dwela-* ‘confused, erring’, with the occasional rounding of \**e* or \**i* after *Cw*, as in \**swestar* > *zuster* ‘sister’, \**twisk-* > *tusschen* ‘between’ and \**swelk-* > *zulk* ‘such’. Beside PGm. \**dwala-* and \**dwula-* ‘foolish’ (Heidermanns 1993: 169–70), \**dwela-* may have been derived secondarily from the verb MDu. *dwelen*, *dwalen*, MoDu. *dwalen* (MLG *dwelen*, OS *fordwelan*) ‘to err’ < PGm. \**dwelan-*, cf. Kroonen 2013: 112.

*dol* ‘thole’ < \**pulla-*, MDu. *dolle*. A DAT.PL. *dolle* is found in Dordrecht in 1286. Kiliaan has *dolle* as a Saxon, Guelrish and Hollandish word. Generally it is *dol* in literary Modern Dutch. Along the West Flemish coast we find *dolle* in modern dialects (WVD).

*geduld* ‘patience’ < \**ga-puldi-*. MDu. *ghedout* next to *gedolt* points to the absence of *i*-mutation. Modern dialects, also in the east, have /œl/, but the sequence *ul* could be restored any time from the ADJ. *geduldig* ‘patient’ and the verb *dulden* ‘to bear, tolerate’.

*hol* ‘den, hollow’ < \**xula-*. Modern fronting is attested very sporadically in Drente and northern Overijssel (Tubbergen), and more consistently in southeastern Limburg, with a lengthened vowel, such as /ø:/. (GTRP; FAND I, Map 81). The latter vocalism will reflect a preform \**xulī-*, cf. German *Höhle* ‘a hollow’. In eastern South Holland and western Utrecht, the toponym *heul* ‘opening in a dike; bridge’ occurs (MDu. *hōle*, *huele*, *heule*), from which the modern surname *Verheul* in eastern South Holland derives. The noun *heul* is explained by the etymological dictionaries from regular *i*-mutation in \**xuli-*. It is conceivable, however, that it represents a western form, Early MDu. \*/ho:lə/ from \**xula-* in the oblique cases, which underwent unconditioned fronting.

*hol* ‘hollow’ ADJ. < \**xula-*. No relevant fronted forms occur in the GTRP database.

*knol* ‘thick root’, originally ‘knoll’ < \**knullan-*. First attested in the sixteenth century. To Kiliaan, *knolle* for ‘turnip’ is Frisian, Guelrish, and Hollandish. For the back vowel in modern dialects of Brabant and Limburg, see PLAND s.v. *knolraap* ‘turnip’. No front vowels are attested.

*kolf* ‘butt; flask’ < \**kulban-*, MDu. *kolve*. Modern West Flemish has *kolve* ‘fist’. No front vowels are attested.

*kolk* ‘pool, eddy; well’ < \**kulka-*. The word is mainly northern Dutch. We find *culck* in the *Informacie* of Holland of 1514 and *kulc* in the Delft *Keurboek* of 1545, and *u* in a few other Hollandish sources. Most literary texts have *o*-vocalism, as does modern North Hollandish (Boekenoogen 2004). Because it is a microtoponym, the word is also well represented in family names. *Kolk* is concentrated in Overijssel and Drente, whereas *Kulk* is mostly found on the South Hollandish coast and on Texel. *Van de Kolk* is especially frequent in Gelderland and *Van der Kolk* in Overijssel,

but also in western parts of the Netherlands. Other eastern forms are *Kolkman* (Achterhoek, Overijssel) and *Modderkolk* on the Veluwe. The names confirm that *kulk* was a (South) Hollandish variant.

*krul* ‘curl’ < \**krulla*-ADJ., \**krullō*-/-*an*- noun. See *FAND* I, Map 120, for the modern dialect variants. The provinces of Antwerp, Flemish Brabant and all of Limburg have a back vowel /o/ or /ɔ/, as is expected from the preform without *i*-mutation factor. All other Dutch dialects, viz. Flemish and nearly all dialects in the Netherlands except for Limburg, have a front rounded vowel, as in the standard language. The authors of *FAND* (p. 250) comment that the spread of /œ/ in the northeast all the way to the German border would be a remarkable case of Hollandish expansion, which is true; and indeed, it could alternatively be due to “dental mutation” (Hoekstra 2007) in the northeastern dialects. The dialect distribution is roughly confirmed by the surnames derived from the adjective, such as *Crul* in East Flanders and *Krul* in Holland and Overijssel vs. *Crol* in South Brabant and *Krol* in Fryslân and, generally, in the northeast. In Early Modern Dutch, *crol* and the verb *crollen* are found with a back vowel also in texts from Holland, and a few relicts of *krol* are given by the *FAND* for North Holland and around Woerden. Boekenoogen 2004 mentions *krol* for a ‘hat with a colourful rim’, which used to be known in North Holland and which may have been called thus after the small curls of the astrakhan fabric. Thus, *krul*(*le*) may originally have been a southwestern word (Flanders, Zealand) more than a Hollandish one, although we already find the surname *Cruls soen* in Gouda in 1374.

*mol* ‘mole’ (the animal) < \**mul(l)a(n)*- . No front vowels are attested at any stage of Dutch. See the Meertens Institute’s *Kaartenbank* for published and unpublished maps with the variants of *mol* in Dutch dialects.

*molm* ‘mould’ < \**mulma*- . Kiliaan has *molm*, and in Late Middle Dutch legal texts from Holland we find *mollem*. In modern dialects I encountered a single fronted form *mulm* for Berlare (East Flanders). There is not enough evidence to draw conclusions.

*pols* ‘pulse, wrist’ < Lat. *pulsus*. Modern dialects show a back vowel everywhere, except for Roeselare, Ieper and Moorslede in southern West Flanders, which have /œ/ (GTRP). Whether this is an old fronting seems uncertain. Taeldeman (1971: 189) thinks that the area with a front vowel used to be larger, reaching to the northeast of Ghent.

*schol* ‘floe; plaice (a fish)’ < \**skullōn*-/-*a*- . Early MDu. *sculle* (Limburg) probably has /u/, since a back vowel appears in MDu. *scolle*, MoDu. *schol*(*le*) in most dialects. A single fronted instance of *schullen* (PL.) ‘plaice’ occurs in a 1495 account from Rotterdam (MNW).

*solfér, sulfer* ‘sulphur’ from Old French *soulfre* > *soufre* or directly from Latin *sulfur*. In the thirteenth century, West Flemish *sulfer* in various sources already

indicates the fronting. *Sulfer* is also the usual form in Modern Dutch literary sources, but *solfer* and *zolfer* also occur, viz., in Flemish, Brabantish and Hollandish sources. In fact, WZD finds *solfer* on all Zealandish islands, in eastern Zeeuws Flanders, and on the South Hollandish islands of Goeree and Overflakkee, whereas *sulfer* is at home in Walcheren and western Zeeuws Flanders. West Flanders has *sulfer* (de Bo 1892: 975). Antwerp, South Brabant and Belgian Limburg have *solfer* with a back vowel.

*stulp* ‘hut, hovel’, *stolp* ‘bell jar’ < \**stulpō-* ‘cover’. Kiliaan has *stolpe* beside *stulpe* ‘fire cover’. The older Hollandish texts all have *stolp*, see also Boekenoogen 2004: 509 for North Holland. The word is not well enough attested outside Holland to warrant further discussion. Another word *stolp(e)* ‘short beam’ has gone out of use.

*vol* ‘full’ beside *vul* < \**fulla-*. In Early Middle Dutch, *vul* is usual in Flanders, Zealand, West Brabant, cf. Berteloot 1984a, Map 63. In Modern Dutch, a front vowel /œ/, /ø/ or /y/ is found in all of Flemish except for Waasland, in western Zeeuws Flanders, and in northern Twente (GTRP database).

*volgen* ‘to follow’ < \**fulgēn*- has a back vowel /o/ or /ɔ/ in all modern dialects (GTRP).

*volk* ‘people’ < \**fulka-*. A back vowel in all Dutch dialects, compare FAND I, Map 82.

*wol* ‘wool’ beside *wul(l)e* < \**wullō-*. Early MDu. *wulle* in Flanders, *wolle* in Brabant and Limburg; similarly, we find *wul(l)e* in modern French Flemish, West Flemish and western East Flemish (GTRP; FAND I, Map 97).

*wolf* ‘wolf’ < \**wulba-*. Early MDu. *wulf* appears with a front vowel in West Flanders and in Ghent. In Modern Dutch, *wulf* is found in French Flanders and sporadically in West Flanders (GTRP, FAND I, Map 98). The distribution of the surnames *De Wulf* versus *De Wolf* shows that the palatalization used to occur further eastward: *De Wulf* dominates in all of West Flanders and in western East Flanders, up to and including Ghent. It may be assumed that StDu. *wolf* has recently replaced *wulf* as an appellative in these regions (FAND I, p. 206, with map).

*wolk* ‘cloud’ < \**wulkō-* F., \**wulkan-* M./N. We find a back vowel in all Dutch dialects (GTRP).

See § 15.3.4 for a survey and interpretation of the results of this section.

### 15.3.2 Lengthened vowel

#### A. With i-mutation

##### 1. p, b

*kreupel* ‘cripple’ < \**krupila-*. See § 15.2.3 for a discussion of this word. It was concluded there that MDu. *krepel* was the native form of the coastal provinces whereas medieval Brabant had *i*-mutated *kreupel* as well as unmutated *kropel*.

## 2. f, v

*deuvel* < \**dubila-*. Early Modern Dutch shows a front rounded vowel in *duevel*, *deuvel*, also *doordeuvelt* ‘pierced with dowels’, and sporadic unrounding to *devel* is found in modern coastal dialects (cf. § 15.2.3).

*deuvik* ‘plug in the vent of a barrel, dowel’ < \**dubika-*. We find MDu. *doevek* (1365, Brussels), 17th-century *deuvi(c)k* and unrounded *devi(c)k* (cf. § 15.2.3).

*euvel, ovel* ‘evil’ < \**ubila-*. Coastal Dutch in general had unrounded *evel*, see § 15.2.3. Eastern Dutch *euvel* is due to *i*-mutation, whereas western and standard Dutch *euvel* could also have rounding of *e*- due to the *v*. MDu. *oevel* can be interpreted as /o:/, but Early Modern Hollandish *oevel* seems to contain /u:/. Whereas a mid vowel /o:/ could be explained from the absence of *i*-mutation (as in western *koning* or *molen*), a high vowel /u:/ would be unexpected. Possibly, *oevel* underwent a specific raising from expected /o:/.

*heus* ‘real, honest’, MDu. *hovesch, hoofsch, heusch* ‘courteous’, ODu. PN *Houesca* < \**xubiska-* ‘of the estate’. We expect *i*-mutation in central and eastern dialects, but we also find fronting in western Dutch. In the original form *heusch*, *v* > *f* has been lost by assimilation to *-sch*. The vowel /ø:/ was restored to *oo* in MoDu. *hoofs* ‘courteous’ on the model of *hof*, PL. *hoven* ‘court’. Compare MoHG *häbsch* ‘pretty’ (the immediate reflex of the Old Germanic preform) versus *höfisch* ‘courteous’ (remade on the basis of *Hof*), which show the same relationship. MDu. *heusch*, MoDu. *heus* is regarded by the dictionaries as a western form. Unfortunately, the medieval spellings <*o*>, <*oo*>, <*oe*> do not inform us about possible vowel fronting. In the sixteenth century, we find *huesch, heusch* in texts from Flanders and Holland, and in standardizing Dutch. Modern dialects of Zealand and Holland have only *eu*-vocalism (*WZD, Kaartenbank* s.v. ‘heus’).

*heuvel, hovel* ‘hill’ < \**xubila-*. Anna Bijns (Antwerp) uses *hovel*, and Kiliaan regards *heuvel* as a variant of *hovel*. After 1600, the usual form in written texts is *heuvel*. In western dialects, the word seems to have been largely replaced by *hil, hul* in recent centuries. The alternative meaning ‘knob’ is also attested in the sixteenth century for *hovel*. To the lexicographer Hexham (1648), *hovel* or *hoevel* mean ‘knob or a bunch’. Another (East Flemish?) variant is *huffel*. In surnames it is found e.g. in *Van Huffel(en)* in East Flanders, *Van Nuffel(en)*, concentrated in East Flanders and West Brabant, and *Van Uffel(en)* in the province of Antwerp. Spellings with *o* such as *Van Hoffel* are extremely rare. Thus, spelling and geography confirm that the noun had *i*-mutation. Whereas the appellative *heuvel* is found in surnames in all productive combinations, for instance, with an article (*Van den Heuvel*) or with patronymic suffixes (*Heuvelmans, Heuvelink*), *huffel* only occurs after *van* and without an article. This suggests that *van Huffel(en)* and variants are all derived from specific toponyms, such as *Steenhuffel* in South Brabant (1112 *Stenhufle, steenhuffle*, 1125 *Stenofle*, 1132 *Stenhuffle*, 1235 *Steenhoffle*; Debrabandere et al. 2010: 241) and *Mertshuffel* in Southeast Brabant (1261 *Mertshuffle*), not from a generic appellative meaning ‘elevation’.

## 3. t, d

*beul* ‘courier; hangman’, MDu. *beudel, bodel* < \**budila-* (OHG *butil*, MoHG *Büttel*, OE *bydel* ‘courier’). The Middle Dutch and Middle Low German spellings *bodel* and *bole*, which may all render /ø:/, are referred to by Kiliaan (partly as Saxon and Guelrish), but there is no certain attestation of ‘hangman’ with a back vowel in Dutch.

*keutel* ‘turd’ < \**kutila-*. We find a front rounded vowel in all Dutch dialects (GTRP). In West Flanders and French Flanders, *keutel(e)* competes with *kreutel(e)*.

*noot* ‘nut’ < \**xnuti-* f. (Kroonen 2013: 237). The word has become an *i*-stem in OHG *nuz*, pl. *nuzzi*. Since ‘nut’ displays *i*-mutation in the east of the Netherlands and in southern Limburg, the same shift to an *i*-stem \**xnuti-* may be assumed for Old Dutch. In central dialects we find /o(:)/, whereas in coastal Dutch, fronting to *neut(e)* with /ø(:)/ is found in French Flanders, the northwestern half of West Flanders, most of Zealand, in southern South Holland, in some traditional central Hollandish dialects, and in West Friesland, see Map 32. Whereas *noot* has become the form of the standard language, metaphorical *neut(je)* ‘small drop of liquor’ and ‘old woman’ has been lexicalized with the front vowel.

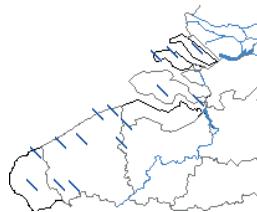


Map 32. Front vowel reflex in *noot* (data: GTRP)

*reu* ‘male dog’ < MDu. *reude* < \**xruþjan-* (Kroonen 2013: 251, cf. MLG *rode*, *rodde*). *rödde* ‘big dog’, OHG *radio*, *rudo*, OE *hroð-hund* ‘useless dog’, *ryþha* ‘big dog’). OHG *rudo* leaves the possibility open that non-umlauted forms were also inherited in Dutch, but it rather seems a more recent form than *radio*. I found no forms with a back vowel (West Flemish *reud*, West and East Flemish *rut* ‘male dog’, North Hollandish *reutel* ‘young dog’).

*scheut* ‘shoot, twinge’ < \**skuti-* m. (OHG *scuz* ‘lightning, speed, shot, projectile’, MoHG *Schuss*, OFri. *skete* ‘shot’, OE *scyte* ‘shot; projectile’). For MDu. *scote* ‘shoot; shot’, the spelling does not enable us to distinguish between the reflexes of \**skuti-* and those of \**skuta-* ‘shooting’ (whence MoDu. *schot* ‘shot’), in particular when the vowel was lengthened in open syllable (e.g., PL. *scoten*, WFla., 1285). An early unequivocal instance of back vocalism for ‘shoot (of a plant)’ is *scoot* in the Hollandish version of Mandeville’s travel diary (1462). In the modern standard language, *scheut* ‘shoot’ and *schot* ‘shot’ have two separate meanings and *schoot* has become extinct (in these meanings), but until 1700, one can also find *scheut* for ‘shot’ and *schoot* for ‘shoot (of a plant)’ in literary texts. The similar meanings and semantic cross-overs between \**skuti-* and \**skuta-* imply that we cannot rely on the difference between *oo* and *eu* to conclude anything about the dialect history. It seems likely that Zealandish and West Flemish *schote* ‘shoot’ represents \**skuti-* (since \**skuta-* would not normally yield a disyllabic stem in modern dialects) and shows the absence of *i*-mutation in coastal Dutch. It is also likely that West Flemish *scheute* ‘shot; shoot’ and Hollandish *scheut* ‘shoot’ are due to unconditioned fronting of Old Dutch \**u*. But we cannot be certain.

*sleutel* ‘key’ < \**slutila-*. Early Middle Dutch generally has *slotel(e)*, but fronting is explicitly written in Brussels *sluetel*, and probably also in Mechelen *sloetele* and WBrab. *sloetel*. Later texts show *eu* in the centre and east but *oo* next to *eu* in Flanders (see also Vereecken 1938: 7–19). In modern dialects, *sleutel(e)* is the main form found throughout all dialects. Dissimilated variants occur in *sneutel* (Huizen, Laren in North Holland), *sneutele* (Zealand, East Flanders) and *sleuter(e)* (Flanders). Back vowels occur in the GTRP database in French and West Flanders and in Zealand. Map 33 indicates the occurrence of stressed /o:/, /o.ə/, /uɔ/, /ou/ in GTRP; see also Vereecken 1938, Map 1, WZD 875. As suggested by Taeldeman 1971: 249, the spread of these back vowels indicates that the word was adopted as \**slutel* by coastal Dutch, before it was fronted (unless the back vowel was influenced by *slot* ‘lock’). An unrounded variant *sneetel* is quoted by Boekenoogen (2004: 484) from a 1667 document from North Holland. It could in theory be the remnant of an earlier, much larger unrounding area for ‘key’, but we have no written evidence to that effect from Middle or Early Modern Dutch. Since Flemish and Zealandish have /o:/, it seems more likely that *sneetel* has a different origin.



Map 33. Back vowel in *sleutel* according to GTRP

#### 4. s, z

*euzie, oozie* << *oose* ‘overhanging part of a sloping roof, eaves’, MDu. *ovese*, from WGm. \**ubis(w)ō-*. In Middle Dutch, a NOM.PL. *ueuesen* /ø:vəzən/ is attested in a 1291 document from Oudenaerde. Other distinctive Middle Dutch spellings are rare, we find *heuziēn* in a charter from Comines (between Ypres and Lille) of 1420 (MNW). Kiliaan (1599) has (*h*)*oosdrup*. For modern dialects, WVD reports general *oo*-vocalism for French and West Flanders and *eu*-vocalism for East Flanders, but local dictionaries also give (*d*)*euzie* for French and West Flanders. Limburg and Brabant generally have *i*-mutation (cf. Roukens 1937 I: 118–121), as does Low German. North Holland has only *o*-vocalism: modern *ozing, hozing*, 1647 *oosem*. This distribution may point to an originally umlautless form in the coastal dialects which later underwent unconditioned frontening.

*kneuzen* (MDu. ptc. also *gheknust*) ‘to bruise’ < \**knusjan-* (OHG *knussan*, OE *cnyssan*). MDu. *cneusen, cnoosen* next to *cnussen* (viz. in the ptc. *gheknust*, translation of B. Engelsman, Haarlem, 1485) shows a similar length alternation as other *jan*-verbs. Most of the Middle Dutch attestations are from Holland, sometimes with explicit *oo*-vocalism (e.g., *die metalen poorten sel ic knoosen* ‘I will crush those metal gates’, 1431), sometimes with an explicit front vowel (e.g., *die sal gheknueset worden* ‘he will be wounded’, 1431). After 1600, nearly all literary texts have *kneuzen*. The only exception I found is *gheknoost* in Hendrik Storm’s *Lucanus* (1620, Amsterdam).

*leus* ‘slogan’, earlier ‘password, war-cry’. First attested early in the sixteenth century as *lose*. Between 1500 and 1700, the noun vacillates between *leus(e)* and *lose, loos(e)* in literary and official texts. The etymology is unclear, see EWN: the word might reflect \**lusi-*, \**lausi-* ‘liberation’ with regular *i*-mutation to *leus*, or \**lusa-* or \**lausā-* ‘loose’, in which case the Dutch *eu*-forms are due to unconditioned fronting.

*neus* ‘nose’ < \**nusi-* or \**nusō-*; for the etymology and dialectal distribution, see § 15.2.4. All modern dialects have a front rounded vowel in *neus* or *neuze*, except for the Limburgian dialects which continue \**nasō-* (GTRP). A back vowel is rarely attested with certainty. In his play *Moortje* (1615), Bredero puts *noos* ‘nose’ in the mouth of Kackerlack and Angeniet, who speak a local North Hollandish vernacular. Since *naze* is the form used by the Haarlem translator of Engelsman (1485), it is

conceivable that the Amstelland dialect of around 1600 retained a reflex of *naas* as *noos*. Alternatively, one could think of Old Frisian *nose*, *nōs*, MoWF *noas*.

*reuzel* ‘lard’ < \**rusila-*. See § 15.2.3 on the etymology. No back vowel forms are attested. There is generally a short vowel in *russel* in northeastern dialects (van Ginneken, unpublished map, see *Kaartenbank*).

## 5. k, g, ch

*beugel* ‘clasp, iron ring’ < \**bugila-*. The word is rarely attested in Middle Dutch. After 1500, we find explicit indication for /ø:/ in all literary texts. An unpublished map on *Kaartenbank*, based on the ANKO database, shows *beugel* for nearly all dialects in the Netherlands, with *buggel* sporadically in Twente and Achterhoek. Modern Flemish dialects have *beug(e)l(e)* or *beu(ē)l(e)*, see WVD. I did not locate any forms with a back vowel.

*breuk* ‘breach, rupture’ < \**bruuki-* M. In spite of the general spelling as <broke> or <broeke>, there is no certain indication for a back vowel realization in Middle Dutch. The sporadic form *broock* in the seventeenth century as a mathematical term for ‘fraction’ may be derived from *gebrook* ‘id’, which has the vocalism of the participle *gebroken*. No modern *oo*-variants were found, except for antiquated *brook* in Gouda (Lafeber 1967: 76). The forms *braoke*, *brööke* /brɔ:kə/, which can be found in Zeeuws Flanders and West Flanders, correspond with StDu. *braak* ‘breaking, burglary’.

*deugd* ‘virtue’ < \**dugunbi-* F. For cognate forms and the presence or absence of a nasal, see § 13.3. I find no certain instances of a back vowel, but van Loey 1976: 50 points to evidence from Middle Dutch rhyme to that effect, e.g. *doget* rhyming with *vōget* ‘guardian’ (MoDu. *voogd*). Even if back vowel forms did exist, we can never exclude influence from the verb *deugen*, *dogen*, where an *i*-mutation factor was lacking.

*heug* ‘liking, fancy’ (< \**xugi/u-* M.), MDu. *hoghe*, *hoeghe*, *hueghe* ‘thought, memory’. There is no early spelling which compellingly points to a back vowel. After 1600, we find only *eu*-spellings.

*heugen* ‘to remember’, *geheugen* ‘id.’, *verheugen* ‘to rejoice’ < \**xugjan-*. Long /ø:/ was certainly prevalent already in Middle Dutch, but we sometimes find <oo> pointing to /o:/, e.g. in Parthenopeus of Blois. Van Loey 1976: 50 points to evidence in Middle Dutch rhyme for a back vowel. Note, however, that there were several West Germanic variants of this verb, some of which did not have an *i*-mutation factor, such as OHG *hogēn*, OFri. *hugia* < \**xugēn-*. Thus, even if back vowel forms such as *hogen* did exist, they do not certainly derive from \**xugjan-*.

*jeugd* ‘youth’ < \**jugunbi-*. In Modern Dutch we find only *eu*-vocalism, but in many dialects *jeugd* is probably imported from the standard language, beside local *jongte* or similar nouns. Clear <oo>-spellings are rare in Middle Dutch, and wherever we find them, as in *yoocht* in Willem van Hildegaeersberch, they interchange with *jeucht* in the same text. In *Der Minnen Loep*, *yoocht* rhymes with *duecht* ‘virtue’.

*jeuken* ‘to itch’ < \**jukjan-*. The vowel quality of Early MDu. *ioken* and the noun *iokede* ‘itch’ (Limb., 1240) is uncertain, but the West Flemish noun *joekte* (Rijmbijbel, 1285) probably renders /o:/. Late Middle Dutch shows front vowels (<ue>, <uy>) and back vowels (<oo>), the latter mainly in Holland and Flanders. Kiliaan (1599) has both *jocken* and *jeucken*. In the WNT entry *jeuken*, published in 1914, *joken* is said to occur only as a solemn and poetic variant in northern Dutch written language; it has since disappeared completely from usage. In modern dialects, according to the GTRP database, we mostly find a front vowel such as /ø:/.

There is also a sizable area with a short vowel in *jukken*. This is found, for instance, in West and East Flanders, Zeeuws Flanders, Walcheren and westernmost North Brabant. In eastern Dutch, the front vowel can be explained by *i*-mutation. Two areas suggest that the variant *jooken* must have occurred in inland Dutch, too. In the western part of the province of Antwerp some dialects have /ju:ɔkə/ or /ju:kə/, and in northern Overijssel and southern Drente we find /jɔkn/ or similar forms. Both areas show a back vowel within an *i*-mutating dialect. Possibly, the back vowel was taken over from a suffixless preterite \**jochte* < \**jukkida*. Alternatively, it may have been adopted from the verb \**jukkōn-* ‘to hop, run’, which has often merged with \**jukjan-* ‘to itch’ in German dialects according to Kroonen 2013: 274.

In western Dutch, the vowels of *jukken* and *jeuken* could be due to unconditioned fronting of \**u*. There are also a few areas with a back vowel, see Map 34. In Holland, Katwijk *jokken* and Aalsmeer *joken* once again show the relic character of these dialects. Most of Zealand plus Goeree-Overflakkee has *joeken*, with *jokken* in Zeeuws Flanders. *Jokken* is also attested in the westernmost dialects of French Flanders, viz. Wulverdinghe, Bollezeele and Nieurlet (these dialects also retain the back vowel in *bok* ‘he-goat’ as opposed to West Flemish *buk*). A compact area in southern East Flanders has *jookn*. It thus seems possible that Early Old Dutch had \**jukkōn*, \**jukip*, which underwent spontaneous fronting in many dialects but retained the back vowel in others. The position before *k* may have favoured the retention of the back vowel.

*keuken* ‘kitchen’ < \**kukinō-*. MDu. *kokene*, *kukene* probably represents /kɔ:kene/. In Early Modern Dutch, the form *kooken* is sometimes found in Hollandish literature beside usual *keuken*. Nearly all modern dialects of Dutch have a front rounded vowel, with the exception of *kooken* in Oude Tonge on Goeree-Overflakkee (GTRP).

*kneukel* ‘knuckle, bone’ < \**knukila-*, see § 15.2.3 s.v. *knekkel*. We find mainly *knokel* in inland Dutch and *kneukel* in coastal Dutch, with occasional unrounding to *knekkel* after 1600.

*kreukel* ‘crease’ < \**krukila-*, or derived from the verb *kreukelen* ‘to crease’. The noun is only attested in *Teuthonista* and after 1500, so that derivation from the verb cannot be excluded. See s.v. *kreuken* in section B below.



Map 34. Back vowel in *jeuken* (data GTRP)

*leugen* ‘a lie’ < \**luginō-* (ODu. *lugina*, Early MDu. *lueghene*). Compare the modern verb *logenstraffen* ‘to belie’, which retains the *oo*-variant, which was frequent in the literature between 1600 and 1800. In the thirteenth century, West Flanders consistently has *loghene* with a back vowel, but in East Flanders we find once *lueghene*. Nearly all modern dialects have a long front rounded vowel or diphthong in the noun ‘lie’, but a few exceptions with a back vowel can be interpreted as traces of erstwhile *logen*, viz. Brouwershaven in Zealand (GTRP), Aalsmeer and Moordrecht in South Holland (van Ginneken, unpublished map, *Kaartenbank*), and *looge* in the more archaic variant of the Gouda city dialect (Lafeber 1967: 126).

*neuken* ‘to knock; fuck’, *verneuken* ‘to make a fool of’ < \**xnukjan-*. There is also a noun *neuck* ‘stub’ in Early Modern Dutch (Zealand). No back vowel variants are found.

*reuk* ‘smell; scent’ < \**ruki-* M. (Early MDu. *roke*, MoHG *Geruch*). The value of the medieval <*o(e)*>-spellings is uncertain. After 1500, literary Dutch mostly has a front rounded vowel, but there are a number of certain instances of /*o:/*, given under the lemma *rook-III* in WNT. *Oo*-variants occur, among others, with the authors

Bijns, Stalpert van der Wielen, Spieghel, Vondel, and Hooft. The demise of *rook* for ‘smell’ in the modern language is ascribed by WNT to the avoidance of homonymy with *rook* ‘smoke’ (< PGm. \**rauki-*). In modern dialects, van Ginneken (unpublished map from 1932, *Kaartenbank*) finds *rook* in southeastern South Holland and *roke* on the islands of Overflakkee and Tholen. According to WZD, the variant *roke* is found more generally on the Zealandish islands, as against *reuke* in Zeeuws Flanders. Flanders in general has *reuke*.

*spreuk* ‘maxim’ < \**spruki-* M. (MDu. *sproke*, MoHG *Spruch*). In Middle Dutch, both *sproke* with /o:/ and *sproke* with /ø:/ must have existed, but the spelling does not allow us to distinguish them. In Modern Dutch after 1600, the simplex is mostly *spreuk*, but, in the seventeenth century, *sproock(e)* ‘speech, utterance, verdict’ occurs with a few Hollandish authors. For example, in one of the *gheestelijcke liedeckens* by J. Jacobsz. Harlingen (Amsterdam, 1612), where *sproocken* rhymes with the participle *broken* ‘broken’. Coornhert frequently uses *sproocke* ‘tale’ in his writings. The back vowel has been generalized in the diminutive *sprookje*, first ‘little tale’, now only ‘fairytale’. The suggestion that *sprookje*, which is attested quite frequently in the seventeenth century, would have introduced its back vowel as a spelling pronunciation based on MDu. *sproke* (as is suggested by several etymological dictionaries of Dutch) must therefore be dismissed. The word is not well enough represented in modern dialects to allow any geographic conclusions.

*teug* ‘draught’ < \**tugi-* M. (also MDu. *toge*, MoDu. *toog*; MoHG *Zug*). In Early Modern Dutch, we find both *toog* ‘the act of pulling; a draught, pull (of liquid); trait’ (in North Holland also *toog* ‘sleigh, sled’), and *teug*, which only refers to a ‘draught’ of liquid. In the modern standard, *teug* ‘draught’ has survived whereas *toog* ‘pulling, trait’ has been replaced by other words (the homonym *toog* ‘counter, bar’ derives from *tonen* ‘to show’). Similarly, in modern dialects, *toog* has all but disappeared. Of course, it cannot be excluded that the *oo*-forms, old and new, were influenced by the verb *togen* ‘to pull’. The meaning ‘draught’ and the explicit spelling with a front rounded vowel for *teug* are already found in the thirteenth century, viz. in DAT.SG. *thueghe* in West Flemish (1287).

*teugel* ‘rein’ < \**tugila-* (MoHG *Zügel*). Most post-1600 spellings point to *eu*. But Anna Roemer Visscher (from Amsterdam) once has *toghel*, and Pannekeet 1984 gives *togel* as an antiquated variant of *teugel* for North Holland. Boekenoogen 2004 has *togels* as ‘reed stalks’; according to WNT, this may well be derived from *togen* ‘to pull’. In fact, for North Hollandish *togel* in general, it cannot be excluded that its vowel replaced *eu* on the model of *togen* (on which see section B).

*vleug* ‘flight; impulse; tinge’ < \**flugi-* M. (MDu. *vloghe*, MoHG *Flug*). It is unclear whether the Middle Dutch spellings, which never explicitly have <ue> or <eu>, allow positing a back vowel for the medieval period. After 1550 we find only a front vowel. Whether West Flemish *vloge* ‘bush, small forest’ is cognate, is also

unclear. Since “*vleuge* or *vloghe*” can mean a swarm of birds in the sixteenth century (Plantin), that seems possible ('bush' as a 'swarm' of trees?).

*vleugel* ‘wing’ < \**flugila-* (MoHG *Flügel*). Middle Dutch unrounding is found in *vlegel*, see § 15.2.3. Early Modern Dutch has *vleugel* beside *vlogel* and the verb *vleugelen* ‘to fetter, tie the hands behind the back’. In modern dialects, East Flanders has *vleugel* (and *vleuger*), NHol. *vleugel*. Elsewhere it has been replaced: Zealand has *vleke*, Holland mostly *vlerk*.

*zeug, zog* ‘sow’ < \**sugu-* < \**suwu-* (OE *sugu*; for this reconstruction, see Kroonen 2011: 152–6, 2013: 490). In Early Middle Dutch, Limburgian *soog* is already opposed to West Flemish *sueghe* beside *soghe*. In Late Middle Dutch the variant *soch* appears especially in Brabant, and in the seventeenth century, *zeug* and *zog* vie for dominance in the literary language. All of this appears to reflect rather well the modern dialectal situation as it emerges from Map 1.8 of TNZN. We find *zeuge* in Flanders and Zealand and *zeug* in South and North Holland, all clearly the result of unconditioned fronting. Directly to the east, in eastern Holland, Utrecht and North Brabant, the type *zog* predominates, and Antwerp and Flemish Brabant have *zoeg*, which in these areas may reflect earlier short *o* before labials and velars (Belemans/Goossens 2000: 121). In East Limburg we find *zoog* with a lengthened vowel. Goossens (1999) has shown that the plural *zeug* which accompanies Brabantish SG. *zog* points to an *i*-stem which in turn may continue an earlier *u*-stem.

## 7. m,n

*beun* ‘stage’ < \**bunī-* (< PGm. \**budnī*, -*jō-*; MoHG *Bühne* ‘stage’, OE *byðne* ‘ship’s bottom’, *bytne* ‘keel’; for the etymology, see Seibold 2011: 161). MDu. *boene* ‘attic’, Early MoDu. *boene*, *buene* ‘roofbeams, floor’ (1599; Kil.), *beun* ‘attic’ (18th c.). Northeastern dialects of Dutch show the effects of *i*-mutation, but the word does not occur in southern Dutch. The same word is also reflected in MoDu. *beun*, *bun*, *bon* ‘creel’. With this meaning, North Hollandish mostly has *bun*, and Zealand regularly has *bun(ne)*, *bunt* for ‘creel, ship’s hold where the fish is kept’ (WZD). In French Flanders, *beun* means ‘cistern’. The interchange between a short and long vowel in *bun* vs. *beun* suggests an Early Middle Dutch paradigm \**bōnə*, OBL. \**būnnəs*, which reflects the PGm. *i/jō*-stem.

*Beunen, Boonen* ‘Boulogne-sur-Mer’ < Latin *Bononia*. Flemish and Hollandish sources from the fifteenth and sixteenth centuries generally have *Buenen*, but the modern translation is *Bonen*, which is probably a spelling pronunciation.

*deun* ‘tune’ < \**duni-*. All unambiguous forms show a long, front rounded vowel.

*deunen* ‘to resound’ < \**dunjan-*. Because of its *th-*, the Limburgian form *thunnen* (1240) probably rests on an original text from the twelfth century or was taken from a Low German source. In literary Modern Dutch, all instances have *eu*-vocalism. An exception is Camphuysen’s *beest-gedooin* (1630) for usual *gedeun* ‘thundering’.

*dreumel* ‘piece of string; small guy’ < \**þrumila-*, a diminutive of *drom* ‘thrum’. The Late medieval West Frisian town laws have *dromellen*, *droemelen*, also plural *druemelen*. North Hollandish *drummelsdraad* ‘repair thread’ (Boekenoogen 2004) shows shortening of *eu* in a compound. A first attestation of metaphorical *dreumel* applied to a person appears in 1669 (Witsen) *Ian dreumel* ‘Jan Drommel’. In Modern Dutch, this meaning is represented by *drommel*, also *arme drommel* ‘poor sod’. In Early Modern Dutch, *drommel* also exists but is mainly used for ‘devil’.

*drom* ‘thrum, piece of string, string-end’ < \**þrumi-* (OHG *trum*, OS *thrumi*, OE *thrum* ‘end (of a string)'). The plural *dreumen*, *druemen* is found in early modern textile industry laws from Holland and Utrecht. A singular *druem*, plural *druemen* occurs in *Gildeboek Schonenvaarders*, Haarlem, 1542.<sup>147</sup> In the seventeenth century the usual forms are SG. *drom*, PL. *drommen*, but we also find fronted forms such as *drum* in van Yk, (*Scheepsbouwkonst*, 1697), ADJ. *dreumd* ‘ragged’ (Bredero), and *dreum*, *dreumel*, or *drom* in Winschoten’s *Seeman* (1681). Modern dialects of Flanders and Antwerp have *drom* with a back vowel, while North Holland has *drumreed* ‘thrum-thread’. We thus seem to have unconditioned fronting of the lengthened vowel in Holland but generalization of the short back vowel in Flanders and Zealand.

*dreunen* ‘to rumble’ < \**drunjan-*. All unambiguous instances show *eu*-vocalism.

*koning*, dial. *keuning* < \**kuninga-* (G. *König*). In Early Middle Dutch, all dialects (Flanders, Brabant, Limburg, Holland) spell *coninc* or, rarely, lengthened *coeninc*. The absence of any front vowel spelling in Flanders and Holland at first sight makes it unlikely that the word had a front vowel in a significant part of the western dialects (for Brabant and Limburg, the assumption of /ø:/ is unproblematic), yet the data from modern Dutch require us to assume just that (Kloeke 1950: 88). In Late Middle Dutch, the spelling *cueninc* with explicit front rounded vowel is still very rare, though a charter from Bruges from 1341 consistently spells (*Jan*) *Cueninc* and *Cueninx*. In the sixteenth century in Flanders, and in the seventeenth century in Holland, *cuening*, *keuningh* are found a bit more often. Vereecken 1938: 19–25 and Map 2 discusses the old and the modern forms, showing that nowadays, inland Dutch always has *keuning* with regular *i*-mutation. The form *keuning* in Flanders and (as a relic form) in Zealand and Holland must be due to unconditioned fronting; the Hollandish towns have generalized *koning* which has become the standard word. In late twentieth-century dialects, the Dutch-Belgian state border plays a significant role: in Belgium, nearly all dialects have a front vowel, whereas in the Netherlands, most dialects close to the border, especially in the west, have a back vowel (GTRP).

<sup>147</sup> <http://www.geneaknowhow.net/vpnd/bronnen/nh/haarlem-haarlem-schonenvaarders-1416-1646-1tm8.pdf>

Vereecken interprets *koning* as the western form from before unconditioned fronting, although it is unclear, in which dialects the back vowel would have originally been retained. Therefore, the view advocated by Kloek (1950: 88) seems more plausible, viz. that *koning* is due to spelling conservatism, preserving the medieval spelling <co-> which before 1500 could stand for /kø:-/, but was later reinterpreted as /ko:-/. The evidence from the family names can be interpreted as supporting this hypothesis, since their spelling is very sensitive to tradition. We find *Koning/k* not only in the west, but also in inland Dutch, where 'king' has (or had, until recently) *i*-mutation throughout. The name *Koning* is found in the northern Netherlands, particularly in North Holland, Groningen, and Drente, *Konink* in East Guelders and Twente, *de Koning* in South Holland and North Brabant, *De Koninck* in West Brabant and East Flanders, *Deconinck* in southern West Flanders, and genitival *Konings*, *Koninckx*, *Conings* in Brabant and Limburg. In comparison, spellings with *eu* or *ue* are very rare: only *Deceuninck* and *De Ceuninck* are relatively frequent in West Flanders, *Keuininckx* is sporadically found in western Limburg.

*monnik, munnik* 'monk' < \**munika-* from medieval Latin *municus* for earlier *monachus*. All Dutch dialects presuppose a preform NOM.ACC.SG. \**munik*, GEN. \**munikes*, in which *i*-mutation would be expected throughout in eastern dialects. In the west, it is uncertain whether one would expect *i*-mutation in the genitive singular. Indeed, in Early Middle Dutch we find spellings which point to a front rounded vowel from Flanders via Brabant to Limburg, but only if the vowel was long. Open syllable lengthening in the strong case forms yielded a long vowel (/mø:nik/ or /mo:nik/), whereas syncope in the weak cases bled lengthening and led to a short stressed vowel (/münk/ or /monk/). The short vowel was then introduced into the strong cases yielding *munnik, monnik*.

The literary spellings do not provide a reliable indication for the vocalism. Modern Dutch family names that contain the word 'monk' show that *i*-mutation or unconditioned fronting must have prevailed in all dialects, since front rounded vowels are pervasive. A lengthened vowel is found in names such as *de Muijnck* (Zealand), *Demuynck* (West Flanders), *De Muynck* (northern Flanders), *Meuninck* (East Flanders), *Smeuninx* (West Limburg), and *Muniken* (Pays d'Herve). Probably, western *Muijnck* represents lengthening of earlier short *u* before *nk*. With short vocalism, the most frequent types are *de Munnik* (Zealand, Holland, northeastern Dutch), *Munnik* (ibidem), *de Munk* (North Holland), *de Munck* (East Flanders, Zealand, South Holland), *de Munnynck* (Ghent, Antwerp, Brussels), *Munnix* (East Limburg, Eupen), and *Munnichs* (central East Limburg). Names with /o:/ are absent from the name inventory, whereas spellings showing /ɔ/ are very rare, being mainly restricted to the eastern part of Twente.

## 9. 1

*heul* ‘culvert, bridge across a ditch; ditch’ < \**xulī-*. The word is only found in the western provinces. In Bruges in the thirteenth century, the fronted spelling *huele* (12x) clearly outweighs *hoele* (3x). In Holland, the medieval spellings <oe> are unclear, but from 1500 on, we only find <ue> and <eu>. West Flemish *heulebrughe*, *hoelebrughe* ‘bridge across a ditch’ (13th c.) occurs as a toponym and a surname. Modern Zealandish mostly has *eule*, but *ole* in Land van Hulst (WZD). For West Flanders, de Bo 1892 gives only *heule*. WVD similarly reports *eu*-vocalism for western Zeeuws Flanders and some adjacent towns, but *oole* in the northern part of Land van Hulst. This would seem a very restricted occurrence for a word that escaped unconditioned fronting. More likely, this *oole* took the back vowel from *hol* ‘hollow’, compare Afrikaans *hool*, PL. *holen* with a long vowel, or from the Middle Dutch noun *hole* ‘hollow’ < \**xulō-*.

*Keulen* ‘Cologne’ < \**kolnjō-* < Lat. *Colōnia* (MDu. *colne*, *coelne*). There is one West Flemish instance of unrounding in *Peter van kelne* (Bruges, 1285).

*molen*, dial. *meulen* ‘mill’ < Late Lat. *molina*, cf. Vereecken 1938: 42–8, who gives the medieval attestations. Most medieval forms point to /ø:/ or have an ambiguous spelling which does not exclude a front rounded vowel, with the exception of *moolne* with Lodewijk van Velthem, who was from Brabant. I was not able to find the Middle Dutch form *melen* cited by van Loey 1976: 45. In modern dialects, we find a front vowel or diphthong everywhere except in Holland and Utrecht, which largely have a back vowel. Some dialects in Zealand and western North Brabant also have *oo* (GTRP, FAND II/III Map 41), which may be regarded as a relic variant in those areas. Nonetheless, there are traces of *eu* in Holland too, e.g. in Gouda (Lafeber 1967, citing Zoet 1895), as well as in North Holland, e.g. in Junius’ spelling *meulen* (1567, *Nomenclator*) and in Town Frisian *mullen*, with vowel shortening from \**meulen* (Kloeke 1950: 90). As in the case of ‘king’, the data from the family names do not exactly match the modern dialects. The surname *van der Meulen* is particularly concentrated in Fryslân, but is widespread all over the northern Netherlands, including Holland. *Van der Molen* is primarily found in Fryslân, Groningen, northern Drente and northern North Holland. *Van der Meule* is typical for Walcheren, and *Vermeule* for Zealand in general. *Vermeulen* occurs in the Betuwe, eastern South Holland, North Brabant, Antwerp, East Flanders and northern Limburg. *Meulemans* is found in Vlaams Brabant and the Campine, but *Molemans* in Belgian Limburg, even though the noun has *i*-mutation in local dialects. Thus, it appears that *molen* was preserved as a conservative spelling and was then introduced in the modern western dialects. It is possible that this orthographic conservatism goes back at least to the fourteenth century. In Gouda, different administrative sources from around the year 1400, edited in Goudriaan et al. 2000, point to a value /ø:/ in ‘mill’ and ‘miller’, as shown by *muelen* (1x) and *muelnaar*,

*muelner* (6x; plus 1x *moelner*). But the simplex is spelled with <oo> in the other four instances: *molen*, *molens*, *Molensteghe* and *Molen worf*.

*veulen* ‘foal’ < \**fulīna-*. See § 15.2.3 for the co-occurrence of etymological \**fulīna-* and \**fulan-* in West Germanic, and Map 1.5 of TNZN for the modern dialect forms. The *i*-mutated form *veulen*, *vulle* in central and eastern dialects suggests that we may reconstruct an *i*-mutation factor for the Old Franconian stage in the Low Countries. In modern dialects, there is a large area with a back vowel in *vool(tje)* in North Holland, as well as a small one on the island of Tholen, and once *oo*-vocalism on the Flemish coast. South Holland has *veul(en)*, whereas most of Zealand and West and French Flanders have the heteronym *kachtel*. East Flanders has *veul(en)*. This situation would be compatible with unconditioned vowel fronting in Flanders which spread to (Zealand and) South Holland, but left Tholen and North Holland unaffected. Note that *i*-mutated *veulen*, *vulle*, in central and eastern dialects borders on the East Flemish and Hollandish *veulen* area.

## 10. r

*beuren* ‘to lift’, *gebeuren* ‘to happen’ < \**burjan-*. The verb has a number of frequent derivatives, but the Middle Dutch spelling does not allow to distinguish /o:/ from /ø:/. In modern Dutch, no forms with a back vowel are attested.

*deur* ‘door’ < \**duri-* F. There are no modern dialects with a back vowel (*GTRP*, *FAND* II/III Map 36).

*keur* ‘choice, statute’ < MDu. *cuere*, *coere*, *core* < \**kuri-* M. (usually F. in Dutch). Beside a single instance of *koor* with Vondel (1620), which may be due to the influence of the verb *kiezen*, ptc. *koren*, all Modern Dutch tokens have *eu*.

*keuren* ‘to prove’. The verb has a lengthened front vowel in all modern dialects (*GTRP*). Middle Dutch *coren* did not have a front vowel, but, quite probably, the modern verb has introduced *eu* from the noun *keur* ‘statute’. In any case, *keuren* is a high-register word nowadays.

*leur* and *loor* ‘loss, deceit’ < WGm. \**luri-* M. < PGm. \**lusi-*, which occur in MoDu. *teleur-stellen* ‘to disappoint’ and *teloor-gaan* ‘to be lost, perish’. EWN rightly underlines the probability that Early MoDu. *te lore* and *te leure* both go back to \**luri-*, a form which would yield *i*-mutation in eastern dialects but not in the west. The words are not attested well enough to support any claims about the distribution of *eu* and *oo* in earlier centuries.

*scheur* ‘crack’ < \**skuri-* M., *scheuren* ‘to tear, rip’ < \**skurjan-* (or denominal to *scheur* within Dutch). The West Flemish spelling <*scur-*> in the thirteenth century in the noun and the verb suggests a front rounded vowel for this area. In modern dialects, Flanders and Walcheren have *scheur(e)* for the noun and *scheure(n)* for the verb, but central and northern Zealand and Goeree-Overflakkee have *schôôr(e)* and *schôôre(n)* with a back vowel. For North Holland, Boekenoogen 2004 gives

*schoren* as the usual form of the verb. This suggests that *oo*-vocalism was original in coastal Dutch.

*sleuren* ‘to drag, trail’ (if from \**slurjan-*); there was also a variant \**slūran-*, to which Zealandish *sluuren*, *sluieren* may belong.

*speuren* ‘to trace’ < \**spurjan-*. I found no clear back vowel variants in Modern Dutch. In MoDu. *naspooren* ‘to track down’ the influence of the noun *spoor* ‘trace’ may be assumed.

*steur* ‘sturgeon’ < \**sturjan-* m. In the thirteenth century, WFle. *stuere* already displays a front vowel. Modern Flemish and Zealandish generally have *eu*-vocalism, as do the dialects of Brabant (in the Willems Enquiry from 1885). No *oo*-forms were found.

*storen* ‘to disturb’ may in theory reflect \**sturjan-* or \**staurjan-*. In literature from Holland from the seventeenth century, *steuren* is found quite frequently. On *Kaartenbank*, there is an unedited map on the verb *storen* in all Dutch dialects drawn in 1932 by van Ginneken (probably based on the earlier enquiries by Te Winkel and Willems). It shows a front vowel *eu* in large parts of Zealand, in southwestern South Holland, in Scheveningen, and in western North Holland. The remainder of Holland, western Utrecht, the western half of Brabant, and nearly all of Flanders, have *storen*. A back vowel *oe* is found in parts of Central Brabant and *uu* in southermost Brabant and parts of East Flanders. For all of these dialects, the vowel variation is similar to that of *horen* ‘to hear’ < \**xaurjan*. *Stoere* is also found in the north and the southwest of Belgian Limburg. A front rounded vowel is found in all northeastern and eastern dialects of Dutch, mostly *steure(n)* but *sture(n)* both in North Limburg and southernmost Limburg. In any case, since the dialects of Brabant and Limburg point to \**staur(j)an-*, it seems likely that the western Dutch forms also go back to \**au* and are therefore irrelevant here.

*vuren* ‘deal’ ADJ. < \**furxina-*. All Middle and Modern Dutch forms have a front rounded vowel, except for one Hollandish document of 1428 which has *vieren* *sparren* ‘deal beams’ (MNW). In Witsen’s *Scheepsbouw* (Amsterdam, 1671), we find another instance of unrounded *vieren* and *vieren-hout* ‘pine-wood’. Since *vuur* ‘fire’ was unrounded to *vier* in the coastal dialects at an early stage, making ‘fire’ and ‘deal’ homonyms, it cannot be excluded that the unrounding in *vieren* ‘deal’ followed the example of *vier* ‘fire’.

See § 15.3.4 for a survey and interpretation of the results of this section.

## B. Without i-mutation

### 1. p, b

*koper* ‘copper’ < WGm. \**kupar* neben \**kuppra-*, from Latin *cuprum*. In Middle Dutch, *koper* alternates with *kopper* due to vowel shortening before *-pr-*. A palatalized variant *kueper* is found in Overijssel and Guelders; WNT ascribes it to influence of the derived adjective \**keuperen* ‘of copper’, itself unattested.

*open* ‘open’ < \**upana*. We find a long back vowel in all Dutch dialects, with the exception of a compact ð-area in southeastern Fryslân, northern Overijssel, and southwestern Drente. In western Dutch, two fronted forms are found, viz. [ø.pən] in Huizen and [?œ:pə] in Brielle (GTRP).

*zope, zeup* (Flanders) ‘draught, swallow’, dimin. *zoopie* ‘drink’, from WGm. \**supan-* (MLG *sōpe* m. ‘draught, drink’, OE *sopa*, ON *sopi* m.) or \**supi-* (Westfalian *süüp* ‘boozing’, MHG *suf, sof* m. ‘soup’, OE *sype* m. ‘sucking’), or both. Early MoDu has *sope, zoope* ‘sauce’ and *zuepe*. Literary sources between 1500 and 1700 give the impression that *oo* is the coastal Dutch vocalism, as against *eu* mainly in southern Dutch. There may also be semantic specialization between *sope* ‘sauce’ and *zeupe* ‘draught’. For modern West Flemish, de Bo (1892) gives a masculine noun *zeup* ‘draught’ and a feminine *zeupe, zope* ‘draught, drink’. The word is not mentioned in WZD.

### 2. f, v

*boven, MDu. beuven* (G. *oben*) ‘above’ < \**bī-ubana*. None of the modern dialects shows a fronted vowel in this word (GTRP; except for Bruges, which has productive fronting). This is in agreement with the spelling <bouen>, <boven> in all Middle Dutch dialects.

*keuvel* ‘monk’s cap, woman’s bonnet’ < \**kublō-* (OE *cufle*). In view of the meaning, the word can hardly be separated from *kuif* ‘forelock’ and *kobbe* ‘crest’ (see above on *kobbe* ‘spider’). A loanword from Latin \**cupella* is therefore less likely, also because *i*-mutation is lacking. Middle Dutch has *kuevele, covel(e), coevel(e)*, which, judging by the later attestations, represent partly /o:/, partly /ø:/ Kiliaan, for instance, has *kovel* with a clear back vowel, but Plantin (1573) gives *kovel* and *keuvel*. Both vowel variants exist in Early Modern Dutch, with *cuevel(e), keuvel(e)* clearly being Flemish but co-occurring beside *oo*-vocalism in Holland. Modern West Flemish and Zealandish have *keuvel*. In North Brabant, the word occurs as *keuvel* in central dialects but is attested as *kovel* in Best, Den Dungen (North Brabant), and Bonheiden (near Antwerp), and in Rotem in Limburg. In combination with Kiliaan’s form, this suggests that *keuvel* is the older inland Dutch variant.

*loven* ‘to praise’ < \**lubōjan-*. In Middle and Modern Dutch, only *loven* with a back vowel is attested.

*oven* ‘oven’ < \**ufna-*. No front vowels are attested in modern dialects (*GTRP*), nor in any of the stages of the literary language.

*roof* ‘scab’, MDu. *rove*, from PGm. \**xruf/bōn-* (ON *hrufa* f. ‘crust’, MoWF *rouwe*) or \**xrufti-* (OHG *hruf*, MHG *ruf* f. ‘scab, leprosy’, MoHG *Rufe*), cf. Kroonen 2013: 246. We find *reuve* in West Flanders and Zeeuws Flanders, and *rove* in central Zealand but with a variant *roeve* beside it in many places. The data from *WBD*, showing *roof* in central North Brabant, *rouf* in eastern North Brabant and *roef* in the province of Antwerp, suggest a preform \**rauf-*. This is supported by a remark in Cornelissen & Vervliet 1899–1906 that the word is pronounced with a mid-to-low *oo* in the southern Campine. It follows that *roof* ‘scab, crust’ was contaminated with the word *roof* ‘fleece’ < \**rauf-* (discussed in § 20.4), and adopted its vocalism in at least a number of dialects. Therefore, western *reuve* is not a reliable witness for the unconditioned fronting of unmutated \**u* or \**o*.

*stoof* ‘oven’ < \**stubō-*, MDu. *stove*. Still *stove*, *stoof* in modern dialects of Zealand, Flanders and Brabant. No vowel fronting is attested.

### 3. t, d

*bode* ‘messenger’, also ‘message’ < \**budan-*. Generally *boo*, *booi* in Zealand, Flanders and Brabant, *bood* in North Holland. No fronted variants occur.

*bodem* ‘bottom’ < \**bupman-*. In the *GTRP* dataset, we find a back vowel in all dialects.

*boter, beuter* ‘butter’ < WGm. \**buterō-* from Latin *butyra*, PL. of *butyrum*. No *i*-mutation factor appears to have worked in the cognate languages: MLG *botter*, OHG *butera*, MoHG *Butter*, OFri. *butera*, *botera*, MoWF *büter*, OE *butere*. In Early MDu. *botre*, *boter*, *botter*, *bueter(e)* (the latter form only in Bruges), the vowel quality is not always clear. Modern dialects, according to the *GTRP* database, show a short, mid palatal vowel [œ] in French and southwestern West Flanders, as well as in northern Zealand, southern South Holland, some archaic coastal dialects of Holland, and West Friesland (and here and there in Drente). The coastal area in between, viz. two thirds of West Flanders, western Zeeuws Vlaanderen, Walcheren and Zuid-Beveland, has *beuter(e)* with a lengthened vowel. Thus, regardless of the differences in vowel length, it appears that all of coastal Dutch originally had a front vowel (cf. Kloeke 1950: 78–85). ‘Butter’ has a back vowel in all central and eastern dialects (cf. Vereecken 1938, Map 9; Taeldeman 1971, Map 21).

*dooier* ‘egg yolk’ < \**dudra(n)-*, OS *dodro*, MDu. *doder*. For the modern dialects, see TNZN Map 9.2. Dialects preserving intervocalic *d* are found in three small areas, viz. the northern part of French Flanders (*dudder*), the southernmost tip of Groningen (*deudel, deutel*), and four points in the Achterhoek (*dodder*). Most dialects of Brabant, Gelderland and Utrecht have changed *d* to *j*, yielding *dooier*, also *doejer, deujer*. Since *dooier* is the standard variant, its spread to Holland, Zealand,

Overijssel and Groningen – where it occurs beside other local variants – is probably recent. Finally, loss of intervocalic *d* characterizes the remaining provinces: *dorre*, *doore*, *door* and similar variants occur in Flanders, Zealand and Holland in the west, and in Limburg plus eastern Antwerp, Overijssel, Drente and Groningen in the east. Some areas, such as southern East Flanders and southern Groningen, have final *-l* rather than *-r*. Except for French Flemish *dudder*, no fronted variants are found to any significant degree in western Dutch.

*goot* ‘gulley, gutter’ < WGm. \**gutō-* (MDu. *gote* f., MoHG *Gosse*) and \**guti-* (MDu. *gote*, MoHG *Guss*). According to the *GTRP* dataset for ‘gulley’, most of the eastern Dutch dialects have *geut(e)* or similar, which presupposes *i*-mutation. In all of Belgium, however, we find a back vowel, also in the *i*-mutating dialects. Hence, these dialects rather continue a preform \**gutō-*, or they have leveled the vowel from non-umlauted forms of the erstwhile paradigm of \**guti-*. In the west of the Netherlands, *geut* ‘gulley’ is restricted to a few dialects in the Meuse delta and to Aalsmeer and Monnickendam. For Zaanstreek, Boekenoogen (2004: 147) remarks that *geut* is sometimes found as a variant beside *goot*. A similar situation holds in Zealand, where *WZD* mentions, beside usual *gote* and *goot*, a rare variant *geute* for Walcheren and Zuid-Beveland. In West Flanders, *geute* (in Veurne-Ambacht: *goote*) means ‘a drop, a pouring’ as opposed to *gote* ‘gulley’ (de Bo 1892). The semantic differentialization must be the reason why Flemish *geute* does not appear in *GTRP* for ‘gulley’. In any case, *geute* must have been quite widespread in coastal Dutch, but it may have coexisted with *gote* for a long time, and both may have had different meanings. Looking at the meaning of the High German forms, I would say that Flemish *geute* corresponds to High German *Guss* ‘pouring’ but Flemish *gote* to *Gosse* ‘gutter’. Thus, putative Old Dutch \**guti-* ‘pouring’ yielded a fronted vowel which is not the case for Old Dutch \**gotō-* ‘gulley’. If this is correct, the Zealandish and Hollandish *eu*-forms meaning ‘gulley’ took their vocalism from ‘pouring’.

*poten* ‘to plant’ < \**putōjan-* (MDu. *poten*, MLG *poten*, *potten*, OE *potian*). No front vowel variants are attested.

*rooien* ‘to pull out trees, potatoes’ < \**rudōjan-* (MDu. *roden*). Early MoDu. *utroeden* > *uitroeien* ‘to extinguish’ represents a dialectal variant which was adopted in the standard language with a specialized meaning. Judging from intervocalic *j* and the texts in which it first occurs, *uitroeien* is probably a Brabantish form, and it may have spread in the standard language because of the religious works of the sixteenth century, such as Bible translations. For ‘uprooting’ trees, Zealand has /ru:jə/, with a reflex of \**ō* that does not match that of the other dialects. In West Flanders we find a plethora of variants, viz. *reuden*, *reun*, *reunen*, *reulen*, *roon*, *ronen*, *roeien* (de Bo). WNT s.v. *reulen* gives the following possible scenario. To begin with, *reuden* seems to have unconditioned fronting of *oo*. Intervocalic *d*-loss yielded *reun*, which got recharacterized as *reunen*. But *reun* and *reunen* could also

be due to fronting of the vowel of *roon* and *roonen*, which presuppose \**roden*. The frequentative *reulen* could go back to \**reudelen* or have been fronted from \**rolen* < \**rodelen*. Thus, although the exact path to the attested *eu*-forms is unclear, they all imply unconditioned fronting.

*schoot* ‘shot; shoot’ < \**skuta-*. See s.v. *schot* and s.v. *scheut* above.

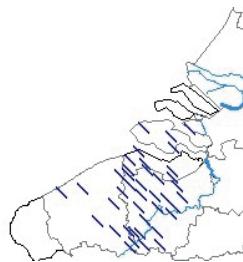
*schuttel, schotel* ‘plate’ < \**skutilō-* < Lat. *scutella*, resp. \**skutalō-* (OHG *scuzzila*, MoHG *Schiüssel*, MLG *schötele*; OS *skutala*, OE *scutel*). Early Middle Dutch has *scotle, scotele* in eastern texts, *scottele, scuttle, scotele, scoetele* and *scuetele* in western dialects. This is easiest to understand if Old Dutch had a vacillating *i*-mutation factor. The back vowel then underwent unconditioned fronting in Holland and Flanders. This, implicitly, is also the position of Taeldeman (1971: 254–55). For *scuttele*, attested mainly in Holland, the explanation from unconditioned fronting is unproblematic anyhow. For *scuetele*, attested in Bruges next to *scoetele*, it is at least possible. Thus, if the eastern forms contain /o:/ (which we cannot know for sure), the Early Middle Dutch data foreshadow the modern dialect situation. Present-day dialects show an unmutated back vowel in most of Brabant and Limburg versus a front rounded vowel in all of French and West Flanders and Zealand, as well as in the more traditional dialects of Holland including West Friesland (*GTRP*; see Taeldeman 1971: 270, Map 21, for the exact border in Flanders). There is also a front rounded vowel in most northeastern dialects. In order to explain the cooccurrence of *i*-mutated and unmutated forms in West Germanic, Franck & van Wijk 1912 assume suffix replacement of borrowed \*-*ilō-* by the inherited variant \*-*alō-*. This seems indeed to be the best option.

*stro(o)t* ‘throat’ < \**strut(t)ō(n)-, -a-* (see also § 15.3.1, B). The word has undergone *r*-metathesis in Flanders, Zealand and Holland, yielding *storte, starte* in the thirteenth century, later also *sterete*. See Belemans & Goossens 2000: 217 for the modern isogloss between *stort* and *stroot*. Thus, the area with unconditioned fronting is irrelevant for this lexeme as the phonetic context has been changed. In East Brabant we find *strote* (1276–1300) with a lengthened vowel. Central and eastern Dutch *strote* > *stroot* was replaced by *strot* (< \**struttō-*) in the standard language in the seventeenth century.

*vloot* ‘fleet; tub’ < \**flutan-* ‘floating object’, MDu. *vlove*. In the meaning ‘butter tub’, a form *vleut* is sometimes found in late texts, but it seems to have an eastern dialectal origin. In western dialects I find only back vowels.

#### 4. S, Z

*blozen* ‘to blush’ < \**blusjan-* or \**blusōn* (MLG *blöschen*, OE *blysian* ‘to be red’, *blyscan* ‘to blush’), or representing a more recent derivative of an ADJ. \**blusa-* ‘red’. Middle Dutch *blöszen* and *bluesen*. In modern dialects of western and northern East Flanders, Zeeuws Flanders, West Flanders (sporadically) and Central Zealand, we find /blø:z(ə)n/, see Map 35. Most other Dutch dialects have a long back vowel or diphthong, as in StDu. *blozen*.



Map 35. Front vowel in *blozen* (GTRP dataset)

##### 5. k, g

*beloke* ‘enclosed field; monastery’ < \**bī-luka-* (ODu. *biloke*, *Billeka*, *Belk*). Early Middle Dutch has *biloke* F., GEN. -*en* (in Flanders) and *bilo(e)c* M., GEN. *bilox* (in Limburg), with stress on the second syllable. Reduction of the pretonic syllable to zero yields Modern Dutch *blook*, *blok*. There is no fronting of \**u* in western dialects. With stress on the first syllable (which must have developed after reduction of \**bī-* to \**bi-*), we find Early MDu. *belec*, *beelc*, *belc*, *buelc* (in West Flanders and Oudenaerde), developing to modern *bilk*, *bulk*.

*boog* ‘bow’ < \**bugan-*. The GTRP database has no front vowel occurrences for *boog*. *knook* ‘bone’ < \**knukan-*. No front vowel variants were found.

*koken* ‘to cook, boil’ < \**kokōjan-*, borrowed from Latin *coquō*. All modern dialects have the regular reflex of lengthened \**o* in open syllable (GTRP).

*koker* ‘case, cylinder’ < \**kukara-* (ODu. *cokare*, MDu. *coker*, MoDu. *ko(o)ker*). No front vowel forms.

*kreuken* ‘to crease’ < \**krukōjan-*. MDu. *croken* ‘to break’ (Cleves/Guelders, 1220–40, rhyming with *gebroken* ‘broken’ and thus proving a back vowel). There is an explicit back vowel in *krooken* in *Der Minnen Loep* (Holland), and in Kilian’s *kröken*, *krocken*. In the seventeenth century, *krooken* and *kreuken* are in competition with each other in the literary language. In modern dialects, I find (*ver*)*kroken* in Antwerp and South Brabant plus the frequentative *krokelen* beside *kroken* in Zealand. There is also a noun *krok* ‘a crease’ in West Flanders and North Holland, corresponding to *kreuk(el)* of the standard language. Thus, it appears that western *kreuken* is due to unconditioned fronting. In eastern dialects, the frequentative has regular *i*-mutation to *kreukelen*, which may have favoured the spread of *eu* to *kreuken*. Note also that standard *kreuken* has shifted its meaning from ‘break’ toward that of *kreukelen* ‘to make folds or wrinkles, to crease’.

dial. *meugen*, *meugt* vs. StDu. *mogen*, *moogt* ‘may’ (OHG *mugun*). Nearly all of western and southern Dutch has *eu*-vocalism in Middle and Early Modern Dutch, according to Vereecken 1938: 48–53 (plus Map 7). She explains *eu* from unconditioned fronting, although she leaves open the possibility that *eu* was adopted

from the subjunctive forms in \**mug-i-*. For modern dialects, the *GTRP* database shows a front rounded vowel in all of Flanders, most of Brabant, and large stretches of northeastern Dutch, but a back vowel *o(u)* or low back *a* (on the analogy of 1SG.+3SG. *mag*) in Zealand, Holland, Utrecht, Limburg, and larger sections of the northeast. The eastern dialects without *i*-mutation and with a rounded back vowel suggest that western *meugen* is due to unconditioned fronting. In the derivative  *mogelijk* ‘possible’, the *GTRP* data show *eu* in all eastern dialects, all of Antwerp, South Brabant, Flanders, and in large parts of Zealand. A back vowel is found in western North Brabant, South and North Holland, and Utrecht, but there are relic forms with /ø/ along the Hollandish coast. The /ø/ in Waterland, Gooi and in southeastern South Holland, on the other hand, may be a remnant of inland Dutch *i*-mutation.

*poken* ‘to stir’ < \**puk-*. No front vowel variants are attested for the verb, but the noun *pook* ‘a thrust’ is found as *peuke* in West Flanders. Vondel has *zijn pijp uitpeuken* ‘to clean out his pipe’, which may belong here.

*stoken* ‘to stir’ < \**stukōjan-*. No front vowel variants are attested.

*togen* ‘to pull, tow’ < \**tugōjan-*. MDu. *togen* ‘to pull, travel’, pret. *toochde*, is occasionally attested in Hollandish and Flemish sources from the fifteenth century onwards. To Kiliaan, it already felt like an antiquated word; he also gives *teugh-naghel* ‘pulling-nail’. Still, *teugen* survives in the seventeenth century and in modern dialects in specific usages such as pulling a plough or a fishing net. We find *eu*-vocalism in a number of coastal dialects. Thus, West Flemish has both *toog* and *teug* as imperatives for ‘proceed, go on!’ (de Bo 1892 s.v. *togen*); see *WNT* for other traces.

*vogel*, dial. *veugel* ‘bird’ < ODu. \**fugal* or \**fogal* < WGm. \**fugla-*. Compare Vereecken 1938: 25–31 plus Map 3, Taeldeman 1971: 269, Map 19. The latter shows *veugel* in all of French and West Flanders, and in the northwestern half of East Flanders. The same front vowel is also usual in all of Zealand, southern South Holland and West Friesland (*GTRP* database, *FAND* II/III, Map 50). Thus, coastal Dutch *veugel* fairly uniformly contrasts with inland Dutch *vogel*.

## 7. m, n

*komen* ‘to come’, MDu. *comen* < \**kweman*. In the *GTRP* database, *komen* has a back vowel in nearly all dialects. It shows up either with a lengthened vowel from \**o* or \**u* in open syllable, or with short /ɔ/ (see *FAND* II/III, Map 34). Older enquiries show basically the same picture. An unpublished map on *Kaartenbank* shows a long /o./ in the infinitive in large tracts of East Flanders and Brabant and in Groningen, versus short /ɔ/ in most other Dutch dialects. There are sporadic instances of *eu*-vocalism in the seventeenth and eighteenth centuries from Holland. Examples include Westerbaen (1624), who has someone from the Hague using *keumen* for ‘to come’, and Witsen (1690), where a Hollandish ship’s pilot says *Kijn sy keumen af* = ‘child, here they come’. Jan van Elsland’s local characters from Haarlem say *keumen* ‘to

come', *keumt* 'comes' and *keumst* 'coming' (1738, *Gezangen*). Still, there are also a number of playwrights in the seventeenth century, such as Bredero and van Santen, who never use *keumen*. The 18th-century manuscript by Kool (see de Vaan 2013b) with North Holland dialect also has *keumen*, *zy keumt* for 'to come, she comes'.

*vroom* 'pious' < MDu. *vrome* ADJ. 'brave, honest' and subst. 'gain' < \**fruman-* 'first'. The word survives in modern West Flemish *vroom*, *vrom* 'strong'. No front vowel variants are attested.

*zomer* 'summer' < \**sumara-*. Early MDu. *somer*, *soemer*. In the seventeenth and eighteenth centuries, *seumer* occurs in a few texts from Zealand (van de Venne, 1623) and Holland (Huygens; *Hoornse Speelwerck*, 1732). In modern dialects, a lengthened front vowel or diphthong is found in Zealand, peripheral dialects of South and North Holland, and in West Friesland (*FAND II/III*, Map 51), whereas Flanders does not share in the fronting. The back vowel in eastern Dutch (except for Groningen) confirms that there was no *i*-mutation factor.

*deun*, *doon*, *don* 'tight, close by, soon' < \**puna/u-* 'stretched' (Kroonen 2013: 551; MLG *don* 'tight', MHG *don* 'stiff, tight'; OS *thona* 'tendril of a plant', OHG *dona* 'tendon'). MDu. *duen* 'tight, stiff' mainly occurs in Hollandish sources. Kiliaan (1599) has *doon* 'right away', 'next to', and there is also *doon* with Marnix van Sint Aldegonde. In the seventeenth century, all literary texts by Hollandish and Zealandish authors have *deun*. In modern dialects, we find *deun* for 'close by' and 'stingy' in North and South Holland. Zealandish has *donne* 'close by; stingy' on Schouwen (*WZD*), and North Hollandish adds *don* 'tight, stiff' (already in 1631). The short vowel in *don*, *donne* is not easily explained, unless it results from contamination with *dun(ne)* 'thin', on which see § 15.2.1, nr. 3. Enschede in Twente has *don* 'drunk'. The expression 'close by' is *doon bie* or *doeën bie* in many modern dialects of East Limburg, and *doon* has tone accent 1. In adjacent Ripuarian dialects, the word is realized as *doon*, *daoen*, *doeën* (see *RhWb* s.v. *don*). These Limburgian and Ripuarian realisations show the local reflex of WGm. \*au before *n*. The vowel may have been conditioned (that is, probably, lowered) by the following *n*, as is shown by the next word.

*gewoon* 'usual' < \**ga-wuna-* (OS *giwuno*). Map 36, drawn on the basis of *GTRP*, is nearly identical to the map *wonen* 'to live' (*FAND II/III*, Map 53). We find a front vowel /ø:/ or /yø/ in all of Flanders, parts of Zealand, in traditional dialects of South Holland and in a few of the archaic North Holland villages. The majority of inland Dutch has no *i*-mutation, which points to a preform \**gawuna-*, with lengthening to /o:/ in inland Dutch and unconditioned fronting in coastal Dutch. The *FAND* comment to *wonen* 'to live' notes that the reflexes in southern Brabant and Limburg are identical to that of *boon* 'bean' < WGm. \**bauna-*. Put differently, in 'wonen' and 'gewoon' the reflexes of \*au and of \*u + open syllable lengthening have merged in this area. *FAND II/III*: 116 tentatively explains this merger from a preference of Dutch for falling diphthongs, which would have caused a change of expected \*/wu:/

or \*/wo:/ to /(w)uə/ or /(w)oə/. Yet *w-* is not normally lost from these words in the southeastern dialects, so that the explanation remains conjectural. In combination with the evidence for *doon* ‘close by’ discussed above, it might instead be argued that the following *n* caused a lowering of Early MDu. \*-ōn- to \*-ōn-, the same vowel as resulted from \*au. A clear difference between ‘gewoon’ and ‘wonen’ lies in the presence of a fronted vowel in the adjective in eastern Limburg. For a tentative explanation of this phenomenon see de Vaan 2014c.



Map 36. Front vowel in *gewoon* (data GTRP)

*heuning* beside *honing* ‘honey’ < \*xunanga-. There is no *i*-mutation factor in the oldest stages of the cognate languages. Early Middle Dutch has only *honech* with loss of the velar nasal through dissimilation. The first forms containing -ng- appear in the fifteenth century, but *honich*, *honig* remains the dominant spelling until the 1800s. Literary *ue*-spellings start to appear in Flanders in some numbers around 1500, but also in the Liesveldt Bible (1526) from Brabant. In the seventeenth century, *heunig* can also be found in Hollandish texts. The modern dialect variants are mapped in TNZN Map 3.9. In western Dutch, front vowel variants such as (*h*)*euning*, (*h*)*eunik* are found in most of southern Brabant, East Flanders, Zealand,

southern South Holland, Scheveningen, 't Gooi, and a number of North Hollandish dialects, including Wieringen. West Flanders mostly has the heteronym *zeem*, but *eunink* is also sporadically found. We may assume that all of coastal Dutch had *heuning* in Middle Dutch (cf. Kloeke 1950: 87). The remainder of South Holland and North Holland nowadays has *honing*, *honig* except for Zandvoort (*hunning*) and Texel (*huning*, the Frisian form; but Jansen 1993 mentions only *heuning*). As to the eastern dialects, they show either fronting to *hunning* (Groningen, Drente, western Overijssel, also the central Campine), or a back vowel in *honing* (Limburg, Betuwe), *honnig*, *honning* (Twente, Achterhoek, northeastern Brabant), or *hoeni(n)g* (Veluwe, eastern Campine, North Limburg). Since *hunning* occurs in an area which productively fronts short rounded back vowels, the eastern dialects agree among each other in the absence of *i*-mutation. It follows that western (*h)euni(n)g* is the result of unconditioned fronting of \**u*.

*kunnen*, dial. *konnen* ‘to be able’ < \**kunnan*. Instead of the inherited short vowel, we find evidence for a lengthened vowel in Early MDu. 2P.IND. *conet*, Late MDu. *coent* and 3P.IND. *co(e)nen*. These forms occur in South Brabant and Flanders beside more usual *connen*. Thus, they have either /ø:/ or /ø:./. Franck (1910: 82 and 138–139) ascribes the rise of the forms with a single *n* to the influence of the paradigm of ‘shall’ (SG. \**skal*, PL. \**skulun*) on ‘can’ (SG. \**kann*, PL. \**kunnun*). One of Franck’s arguments is the geographical spread: we find *conen* mainly in Brabant, which also has *solen*. In Early Modern Dutch, *c/kuenen*, *c/keunen* are found in literary sources of West Flemish, Zealandish and Hollandish origin. In modern dialects, *keunen* is found in the Ms. – Kool of the eighteenth century for North Holland, in Pannekeet (1984: 164), and it is found in West Flemish beside *kunnen* just like *jeunen* ‘to grant’ beside *junnen* (de Bo 1892). According to an unpublished dialect map in *Kaartenbank*,<sup>148</sup> the vowel /ø/ of *keunen* ‘they can’ is found in the western half of East Flanders and the adjacent area around Kortrijk. In Zealandish, *keunen* is only found in Westdorpe in Zeeuws Flanders (WZD).

*steunen* ‘to support’ < \**stunōjan*. MDu. *stonen*. Explicit front vowels occur in *stuuen* (Leiden, 1419), Early MoDu. *stuuen* ‘to oppose’ (in Flemish texts of the 1500s), and *steunen* (from Plantin and Kilian onwards). According to an unpublished map from *Kaartenbank*, *steunen* ‘support’ had /ø:/ in all dialects of the Netherlands (with minor local variants), with the exception of Katwijk *steene*, which must be due to confusion with *stenen* = *steunen* ‘to moan’. The eastern data suggest that the verb had *i*-mutation.

*wonen* ‘to live’ < \**wunēn*: see above s.v. *gewoon*.

148. <http://www.meertens.knaw.nl/kaartenbank/kaart/dialectkaart.html?id=25543>.

*zoon* < \**sunu-*. The modern dialects show a back vowel in the southeast and the centre of the Dutch linguistic area, as expected, but a front vowel in nearly all of Flanders and Zealand, and in most of the traditional Hollandish dialects from Goeree-Overflakkee to Texel. The form *zeun(e)* in these areas is best explained from unconditioned fronting of an earlier back vowel, as per *FAND II/III*, p. 104 and Map 47.

## 9. 1

*kool* ‘coal’ < \**kula(n)-*. All modern dialects have a lengthened back vowel, with the exception of Bruges /kø.lø/, the regularly fronted local variant (*GTRP*).

*zool* ‘sole (of the foot)’ < Lat. *sola* (G. *Sohle*). The *GTRP* database shows a lengthened front vowel /ø:/ in northern French Flanders and West Flanders, in many parts of Zealand and on Overflakkee. All other dialects have a (long) back vowel.

*zole* ‘plough’, *zeulen* ‘to drag’. The verb is only attested with *eu* and only since 1598. It is clearly derived from the noun for ‘plough’, Early MDu. *suele* (WFla., 1291), also in the PN *Soelwiel* ‘Plough’s Wheel’ (EFla.), MDu. *sole*, Early Modern Flemish *zeule*, *zulle*, *soole*, from WGm. \**sulx*-F. (cf. OE *sulh*, PL. *sylh*). For ‘plough’ or a specific part of the plough, Modern Flemish has *zole* in French Flanders and western West Flanders, *zeule* beside *zoole* in northern West Flanders, and *zeul* beside *zool* in southern East Flanders (WVD). Similarly, modern Zealandish has mostly *zeule* (on Walcheren, Beveland, Tholen, Overflakkee, in western Zeeuws Flanders), but also *zole*, *zool* (Schouwen-Duiveland, Goeree), and *zolle*. The verb ‘to plough’ is generally *zolen* in French Flanders and southwestern West Flanders. For want of eastern reflexes of this word, we cannot say whether the stem would have had *i*-mutation in Old Franconian. The safe bet seems to be that it would have had a singular without *i*-mutation and a plural with it. In any case, the peripheral location of the *oo*-variants in French Flanders and northern Zealand suggests that *zole* is older and *zeule* more recent, which implies that *zeule* has spread at the expense of *zole*.

## 10. r

*boor* ‘drill’, MDu. *bore* < \**buran* (OHG *bora*), derivative of the verb *boren* ‘to drill’, MDu. *boren* < PGm. \**burōjan-*. No front vowel forms are attested except in East Flanders, where they correspond with the regular reflex of \**au* (see *FAND II/III* Map 31). In some other regions, too, *boren* has joined the reflexes of \**au*.

*gloren* ‘to shimmer, glore’ < \**gluzVn*, derived noun *gloor*. These words are not attested before 1584 in Spiegel’s *Tweespraak*. Verb and noun are usually found with a back vowel in the seventeenth century. In modern North Hollandish they have *oo*, elsewhere they have mostly disappeared.

*goor* ‘dirty’, MDu. *gore* F., also *gorre* ‘dirt, mud’, *goor* N. ‘dirt; fish-seed’ < \**gurwa-*. Through reinterpretation, the noun has become an adjective in Modern Dutch. It is never attested with a front vowel.

*bekoren* ‘to charm’, MDu. *becoren* ‘to taste, test’ < \**kurōjan*- . In the meaning ‘to test’, early modern authors of Flemish and Hollandish descent also spell *becueren*, *bekeuren*. It is homonymous with *bekeuren* ‘to arrange, fine’ which is denominal to the noun *keur* ‘choice; statute’. Since the simplex *keuren* ‘to examine’ had a front vowel at the latest in the sixteenth century, it cannot be determined whether the *eu*-variant of *bekoren* was taken from *keuren* or represents an independent fronting of the *oo* in *bekoren*.

*schoren* ‘to shore, support’, *schoor* ‘support’ < \**skurō(jan)*- . No front vowels are attested in literary Dutch nor in modern western dialects.

*smoren* ‘to suffocate, braise’ (OE *smorian*) < \**smurōjan*- . Early MDu. *versmoren* ‘to suffocate’, Early MoDu. *smooren*. Hexham’s dictionary (1648) has *smeuren ofte smooren* ‘to evaporate, consume away in smoke’. For *versmeuren*, WNT cites a few occurrences of *versmeuren* in sixteenth-century works from Antwerp and Holland. In de Castelein’s *Rhetoriken* from 1555, the author of which came from Oudenaerde, we find *versmueren* ‘to drown’, which is given as *versmooren* in de Bo’s dictionary of West Flemish and as *versmôre(n)* in *WZD*.

*spoor* ‘track’ n. < \**spura-* (Kroonen 2013: 471), MDu. *spor* and (with *oo* taken from the oblique case forms) *spoor*. Most Modern Dutch forms have a back vowel, but we find *speur* in a Flemish ordinance from 1613, with the Zealandish author de Brune (17th c.), and with Carel van Mander. *Speur* is both ‘footstep’ and the ‘track’ of a car in modern West Flemish and in Zeeuws Flemish (*WZD* 909), whereas the remainder of Zealand and North Holland have *spoor*.

*spoor* ‘spur’ m. < \**spuran-* (OHG *sporo*), MDu. *spore*. West Flemish has *spoor(e)* or *sporre*. I found no forms with a front vowel.

*vore* ‘furrow’ < \**furxō-*. Beside usual literary *vore*, *voor*, we find *veur* with Cats (Zealand, 17th c.) and Berkhey (Holland, late 18th c.). In West Flemish, *veur(e)* is usual but western French Flanders preserves *vore*. In modern dialects of Zealand and southern South Holland, *veur(e)* is the usual form (*WZD*). North Holland has *voor* but in Assendelft *veur* (Boekenogen 2004). The other usual form in North Holland was *vurg*.

See § 15.3.4 for a survey and interpretation of the results of this section.

### 15.3.3 Etymological variation between /u/ and /ü/

*door* ‘through’, dial. *deur* (< \**burx* and \**buri*). Map 44 in *FAND* II/III provides the modern distribution of dialect variants. All of Flanders, Zealand, nearly all of Brabant, Gelderland and the northeastern dialects have a front rounded vowel such as /ø/ or /œ/. Much of Limburg has a long back vowel or diphthong, and the same is true for northern South Holland and a number of dialects in North Holland. In their comments on Map 44, the authors of *FAND* argue that *deur* is more original than *door* in Holland. This is supported by the data of the thirteenth century as per

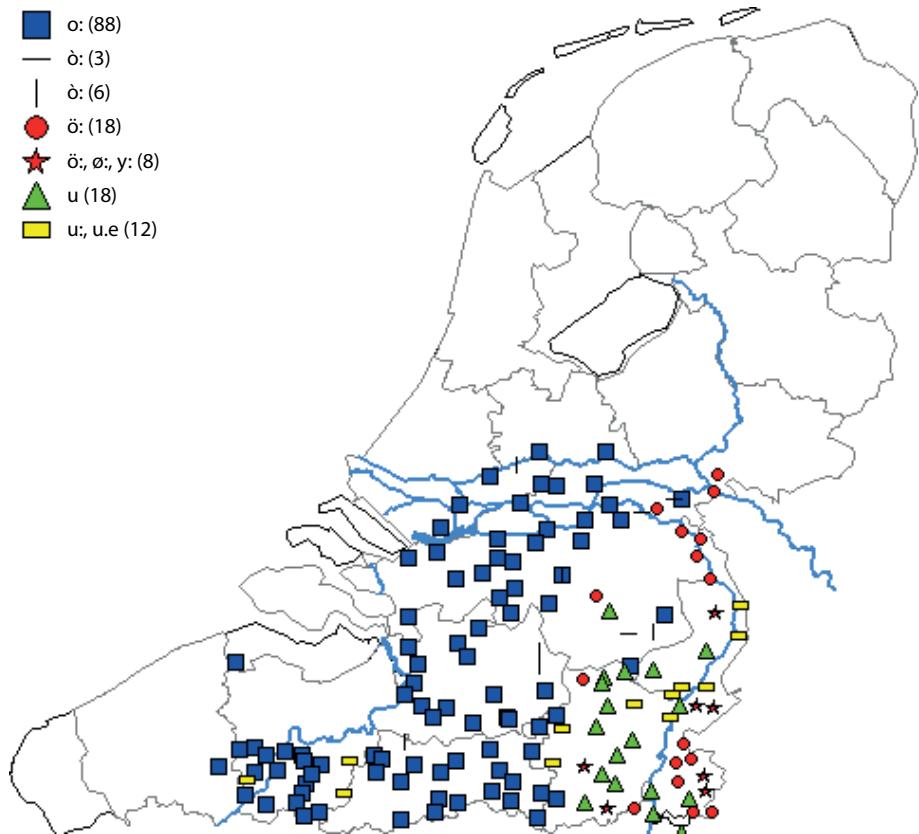
Mooijaart (1992: 123), and by *duer*-spellings in North Holland in the fourteenth century (CRM14).

Historically, the Limburgian *door*-forms can be linked to the German type *durch*, i.e. \**puru* < \**purux* < \**purx*. The front vowel of the other inland Dutch dialects requires \**puri*. It seems likely that this vocalism was due to analogy with \**furi* ‘for’. The Hollandish and Flemish form *deur*, on the other hand, must be due to unconditioned fronting of earlier \**u*.

The back vowel in standard *door* still remains to be accounted for: where would *oo* have come from if coastal and inland Dutch (except Limburg) both had *eu*? In my view, the Early Middle Dutch evidence shows too many <*oo*>-spellings in Flanders and Brabant to maintain that the word only had /ɔ:/-vocalism in these areas. Therefore, I propose that Late Old Dutch had both \**puru* (the inherited variant, attested as *thuro* in the Wachtendonck Psalter) and \**puri* (renewed on the basis of \**furi*). MDu. *door*, shortened *dor*, and MoDu. *door* can then continue the unmutated form in \*-*u* whereas inland Dutch *deur* will represent \**puri*. Coastal Dutch *deur* remains ambiguous: if it underwent unconditioned fronting, it may reflect either \*-*o* or \*-*i*.

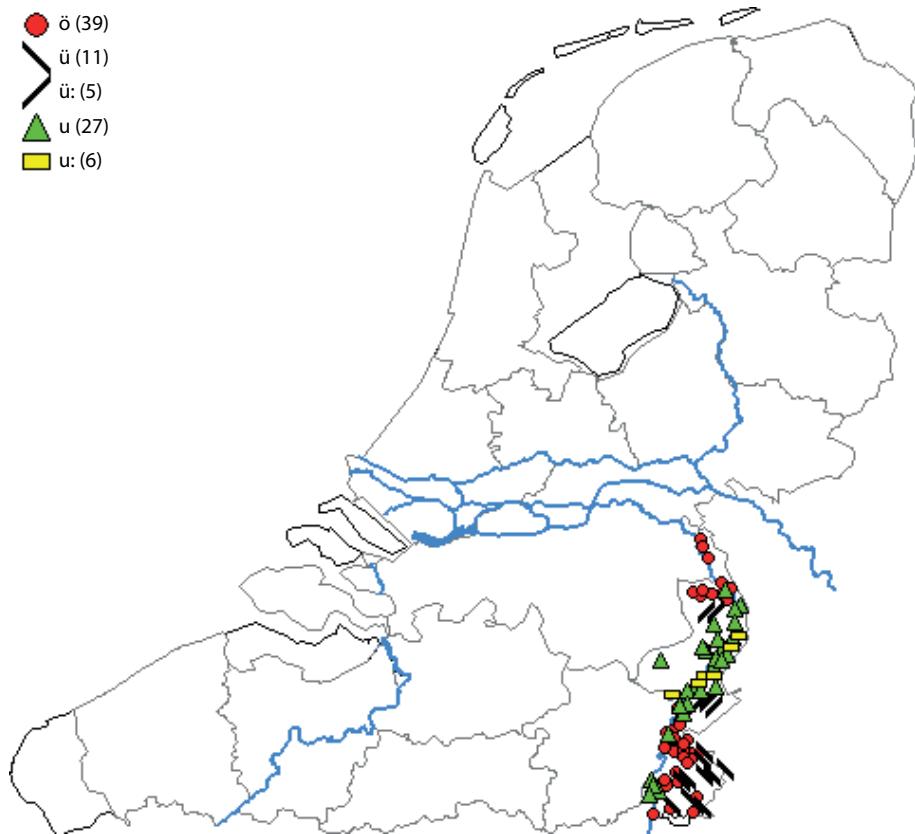
*Jood* ‘Jew’ < Continental WGm. \**judjan-* and \**judan-* from Latin *Iudeus* (OS *judeo*, *jutheo*, OHG *judeo*, MHG *jüde*, OFri. *juda*, *jotha*, MoWF *joad*), adopted in Germanic with the weak inflexion like other ethnic names such as *Franko* and *Sahso* (see Hofmann 1982 for a discussion of the variation in ‘Jew’ in the Old Germanic languages and for the reconstruction). The word is attested in Early Middle Flemish as *juede* with an explicit front rounded vowel, more rarely as *joede*, but in West Brabant mostly as *Ijoede* or *Jode* (which may hide *i*-mutation, since the *i*-mutated ADJ. \**judiska-* ‘Jewish’ is found in West Brabant as *ijo(e)dsch* ‘Jewish’). The first reliable instance of a back vowel is *Jood* in a text from Holland from ca. 1440. In Early Modern Dutch, *Jode*, *Jood* is the prevailing form in Holland, but occasional *eu*-spellings in farcical plays and other texts suggest that the lower registers said *Jeud(e)*, e.g., *Jeun* ‘Jews’ (Dordrecht, 1569), *Jueden* (1622, W. D. Hooft), *Ieud* ‘Jew’, *jeud-werk* ‘fine sowing work’ (1642, Tengnagel), *Jeude-kerk* ‘Jews’ church’ (1654, Schellinx). Kiliaan (1599) has *Iode* and *Iodsch* and modern dialects confirm that *Jood* is the Brabantish form. This suggest that Middle Flemish and Early Modern Hollandish *Jeud(e)* is due to unconditioned fronting.

Map 37 renders the responses for ‘Jood’ in the Willems enquiry of the 1880s. I have concentrated on Brabant, Limburg, and southern Guelders, because that is the area where *i*-mutation would show up. Flanders and Zealand have not been included in the map, and the Willems enquiry contains little evidence from the dialects north of the Rhine. We find long /ɔ:/, sometimes realized as low /ɔ:/ or shortened to /ɔ/, in East Flanders and all of Brabant (except for its northeastern part, for which data are lacking) and in the Betuwe. This is consistent with the western and standard form *Jood*, and contains the regular reflex of short \**o* or \**u* in open syllable, as in *gescho-ten* ‘shot’ or *vogel*. In Limburg and adjacent parts of North Brabant and Guelders,



Map 37. *Jood* in the Willems enquiry

however, we find two different reflexes: high back /u/ and front rounded /ö/, both in short and long variants. The distribution of the Limburgian reflexes /u:/ and /u/ does not match any single one of the inherited vowels, since WGm. \*ū would normally yield a front vowel in westernmost Belgian Limburg, and would not be shortened to /u/ so pervasively. The spread of the fronted vowels also does not match any known distribution: it is too restricted to represent an old instance of *i*-mutation, and the variation between long and short vowel in southeast Limburg is unusual. Map 38 zooms in on the province of Dutch Limburg and provides the data from the SGV enquiry at the beginning of the twentieth century. It shows that /jöt/ was dominant in northern Limburg, and /jöt/ beside /jüt/ in South Limburg, whereas Central Limburg mainly has umlautless /ju(:)t/. Some of the instances with short /u/ in the central area probably hide long /u:/, because the transcriptions often do not allow us to make the relevant length distinction. A small area south of Roermond has the *i*-mutated variant /y:/ of /u:/. The word has tone accent 1 as far as we can tell, in accordance with the loss of the Middle Dutch unstressed syllable after \*d.



Map 38. *Jood* in East Limburg in the SGV enquiry

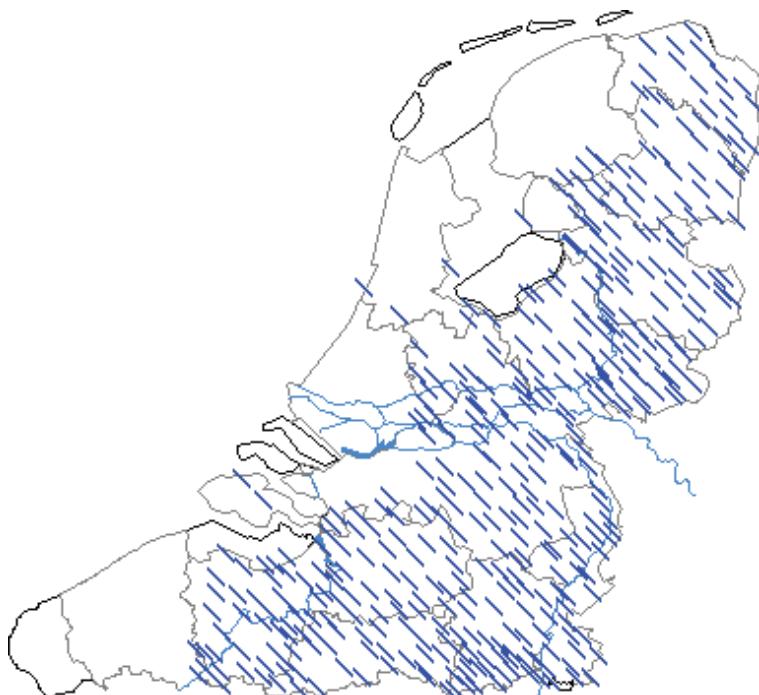
The same variation as in Limburg is found in the adjacent parts of Germany, cf. Hofmann 1982: 300–2. For Ripuarian and the Cleves/Gelder area, *Rheinisches Wörterbuch* regards sg. /jyt/ or /jöt/ as the main variant, occasionally with a long vowel. Besides, sg. /jut/, pl. /ju:də/ also occurs. Some dialects have /u/ and /y/ side by side in the singular.

Hence, the evidence points to \**judan-* (in Brabantish /jo:d/) and \**judjan-* > \**jüddan-* (in Limburgian and Ripuarian /jyd/) as inherited stems. Furthermore, it is possible that Latin *Iudeus* and High German *Jude* influenced the vernacular forms at different moments throughout history, causing restoration of /u(:)/.

*over*, southeastern *euver* ‘over, about’ < \**uberi* (OHG *ubar* and *ubiri*, ODu. *ouir*, MDu. MoDu. *over*). All of Modern Dutch has a back vowel except for the city of Bruges (where fronting is probably secondary) and the dialects and Limburg and the extreme southeast of Brabant, which have *euver*, *uuver* or their unrounded

counterparts. Although the southeastern forms must be due to the inherited *i*-mutation factor, the absence of *i*-mutation from other eastern dialects suggest that Old Dutch had two variants of the preposition/adverb, viz. one with and one without *i*-mutation; compare OHG *ubar* next to *ubiri*. This means that western Dutch *over* can represent either the unmutated Old Dutch variant, or the adoption of Old Franconian *\*ubir* with loss of the mutation factor.

*voor*, dial. *veur* ‘for, before’ < \**furi* and \**fura* (ODu. *furi*, *fure* and *fora*, *fore*). West Germanic inherited two variants of this word, of which \**furi* regularly acquired an *i*-mutated vowel (G. *für*) whereas \**fura* did not (G. *vor*). In modern dialects, the GTRP database shows a front vowel in all central and eastern dialects (see Map 39) as against a back vowel in the western dialects. The conspicuous role of the state border in northwestern Brabant (*veur* to the South, *voor* to the North) and the sporadic attestations of *veur* in Zealand and Holland suggest that *voor* encroached on *veur* with the aid of the standard language.



Map 39. Front vowel in *voor* ‘for’ (data GTRP)

### 15.3.4 Summaries

We have reviewed ca. 360 Dutch etyma with West Germanic \**u*, including Latin loanwords with *u* or *o*, and some with Old French *o*. Coastal Dutch has a fourfold reflex of these short vowels: (1) short front rounded (as in Modern Dutch *u*), (2) short back rounded (MoDu. *o*), (3) long front rounded (MoDu. *eu*), (4) long back rounded (MoDu. *oo*).

As sketched in § 15.1.1, several different hypotheses have been put forward to account for the origins of the coastal Dutch distribution. The main explanatory models are the following:

Hypothesis 1: The distribution reflects the presence or absence of vowel mutation factors.

Hypothesis 2: The distribution is due to unconditioned fronting of Old Franco-nian \**u*.

Hypothesis 3: The distribution depends on the consonants preceding and/or following the vowel.

Hypothesis 4: The distribution can be explained from a combination of the above factors: vowel mutation, unconditioned fronting, and/or the consonantal environment.

In order to decide between these options, I will summarize the evidence in four different subsections, according to the following criteria:

- a. The presence or absence of a WGm. *i*-mutation factor.
- b. The distinction between OFra. \**u* and \**o*, as far as it depended on the vowel in the second syllable.
- c. The consonants preceding or following WGm. \**u*.
- d. The dialect geography of the coastal Dutch reflexes.

Evidence which was judged to be uncertain or irrelevant in the course of the investigation has been excluded from the enumerations below. This concerns, for instance, words for which we do not have enough data from western Dutch, words where analogy with cognate forms may have played a major role, and words which are suspect of influence from the written language.<sup>149</sup>

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<sup>149</sup> In this section, I use the following, reduced abbreviations: F = Flanders, FF = French Flanders, WF = West Flanders, EF = East Flanders, ZF = Zeeuws Flanders, Z = Zealand, H = Holland, SH = South Holland, NH = North Holland, U = Utrecht. The word “only” in front of an abbreviation means that the word is not attested in relevant dialectal sources of the other areas, “spor.” means “sporadically” and “arch.” means “archaic” (from the viewpoint of modern dialects).

### Summary 1. The coastal Dutch distribution compared with WGm. i-mutation

The presence of an *i*-mutation factor often goes hand in hand with a front vowel reflex in coastal Dutch, either in all dialects or in a subset. Conversely, of those words which have a back vowel in all coastal dialects, only *brommen* and *om* may have had *i*-mutation in Old Germanic, whereas the remaining ca. 120 lexemes with a back vowel did not have *i*-mutation. This distribution could suggest a causal link between *i*-mutation and coastal Dutch fronting, but two other facts seem to contradict such a link.

Firstly, around a dozen words have vowel fronting throughout but did not have *i*-mutation. This group includes some very frequent words, such as *zeun* ‘son’, *weunen* ‘to live’, and *veugel* ‘bird’. Compare:

With *i*-mutation factor in West Germanic:

*kreupel, kubbe, lubben, deuvel, deuvik, heus, heuvel; geut, keutel, neut, nutte, schuttel, beul, kudde, mudde, reu; bus(k), kust, lust, reuzel, schutten, stutten; Beunen, deun, deunen, dreunen, kunnen, keuning, munnik; heul, hulle(n), Keulen, m(e)ul, bult, gulden, hulde, hulst, zult, beuren, deur, keur, speuren, steur; breuk, drukken, kneukel, neukan, beugel, deugd, heugen, jeugd, stug, vleug, vlug, gehucht, vluchten, zucht, zuchten.*

No *i*-mutation factor in West Germanic:

*beuter, reuden, dus, kust ‘coast’, heuning, steunen, geweun, weunen, zeun, bul ‘bull’, veugel, zeug, buchel.*

Secondly, the words with a geographically restricted front vowel reflex are distributed fairly evenly between West Germanic forms with and without *i*-mutation. If *i*-mutation were the decisive factor, we would not expect this distribution. Compare:

With *i*-mutation and partial fronting:

*dreupel/dropel, druppen/droppen, schuppe/schoppe, zeup/zoop, tubbe/tobbe, schubbe/schobbe, euvel/oevel;*  
*dreumel/drommel, dreum/drom;*  
*butte/botte, geut/goot, dutten/dodden, sleutel/slotel, schudden/schdden;*  
*busse/bosse, bussel/bossel, kussen/kossen, mus/mosk, mussel/mossel, bleuzen/blozen, euzie/oozie, kneuzen, neus;*  
*bun/bon, begunde/begonde, bundel/bondel, zunde/zonde, munt/mont;*  
*heul/hol, veulen/vool, vullen/vollen, bulgen/verbolgen, schuld/schoud, wullen/wollen, zeule/zole, scheur/schoor;*  
*bukken/bokken, druk/drok, jeuken/jokken, keuken/kooken, geluk/gelok, plukken/plokken, pukkel/pokkel, reuk/rook, rukken/rokken, spreuk/sprook, sukkel/sokkel, leugen/loogen, meug/moog, lugge/log, mug/mog, rugge/orgge, teug/toog, teugel/togel, vleugel/vlogel, bucht/bocht, klucht/kloft, vucht/vocht.*

No *i*-mutation and partial fronting:

*pup/pop, up/op, schuppen/schoppen, schup/schop, bubbel/bobbel, dubben/dobber, dubbel/dobbel, lub/lob, tup/top, duf/dof, juffer/joffer, keuvel/kovel; gum/gom, keumen/komen, krum/krom, nummer/nommer, zeumer/zomer; but/bot, dudder/dodder, gut/god, mudder/modder, zudde/zodde; kusten/kosten; dunder/donder, plund/plond-, nun/non, slunse/slons, tun/ton, zun/zon, zundag/zondag, zunder/zonder; dul/dol, krul/krol, vul/vol, bulster/bolster, kulk/kolk, puls/pols, sulfer/solfer, stulp/stolp, wul/wol, zeul/zool, wulf/wolf; smeuren/smoren, speur/spoor, veur/voor ‘furrow’; buk/bok, juk/jok, kreukken/kroken, puk/pok, plug/plog, teugen/togen, bucht/bocht ‘dirt’, lucht/locht, uchtend/ochtend, vrucht/vrocht; dunken/donken.*

This survey contradicts the view that *i*-mutation was the only or the decisive factor in the fronting of \**u*. But it does not necessarily imply that *i*-mutation factors were completely irrelevant to the distribution observed.

### Summary 2. *The coastal Dutch distribution compared with West Germanic a-mutation*

West Germanic *a*-mutation, or, as it is sometimes termed, high/low mutation, governs the distinction between Old Dutch \**u*, which occurred before \**u*, \**i*, \**ī*, or \**j* in the next syllable and in monosyllables, and Old Dutch \**o*, occurring before a following mid or low vowel. Buccini 1995 specified the main factors in the following way:

- \*/*u*/ in the environments *CuCi*, *CuCj*, *CuCu*, *CuNCV* in all West Germanic dialects.
- \*/*u*/ or \*/*o*/ in the environments *CumV*, *CunV*, *C<sub>[lab]</sub>uC* in Anglo-Frisian.
- \*/*o*/ in the environments *CoCa*, *CoCō*, *CoCē*, in all West Germanic dialects.

Old Dutch \*/*u*/ in the environment *CuCi/j* has already been discussed in the previous summary. Here is an overview of the distribution in the remaining environments, with *NC* divided into the two subcategories *nT* (*n* plus dental obstruent) and *nK* (*n* plus velar obstruent). The evidence is grouped according to whether the coastal dialects always have a front vowel, always a back vowel, or a front vowel in part of the dialects (“partly”).

#### A. WGm. \**CuCu*

Always front: *zeun, lust*.

Partly front: *lucht/locht, vrucht/vrocht, deun/donne, uchtend/ochtend*.

Always back: none.

#### B. WGm. \**CunTV*

Always front: none.

- Partly front: *begunde/begonde, bundel/bondel, zunde/zonde, munt/mont, plund-/plond-, slunse/slons, zunder/zonder.*
- Always back: *grond, blond, gezond, hond, honderd, mond.*
- C. WGm. \*CunKV
- Always front: none.
- Partly front: *dunken/donken.*
- Always back: *dronk, dronken, honger, donker, jong, tong, vonk.*
- D. WGm. \*Cum(C)V
- Always front: none.
- Partly front: *dreumel/drommel, dreum/drom, keumen/komen, krum/krom, zeumer/zomer.*
- Always back: *brommen, hommel, om, dom, kom, lomp, som-, stom, stomp, vroom.*
- E. WGm. \*CunV
- Always front: *Beunen, deun, deunen, dreunen, kunnen, keuning, munnik, heuning, steunen, geweun, weunen.*
- Partly front: *bun/bon, deun/donne, dunder/donder, zunday/zondag, nun/non, tun/ton, zun/zon.*
- Always back: none.
- F. WGm. \*C<sub>[lab]</sub>uC
- Always front: *beuter/butter, beul, bult, m(e)ul, beuren, speuren, beugel, bus ‘wood’, bul ‘bull’, veugel ‘bird’, buchel ‘hump’.*
- Partly front: *butte/botte, busse/bosse, bussel/bossel, meulen/molen, veulen/vool, vullen/vollen, wullen/wollen, pukkel/pokkel, meug/moog, mug/mog, bucht/bucht, vucht/vocht, musk/mosk, veulen/vool, bulgen/verbolgen, bukken/bokken, pup/pop, bubbel/bobbel, but/bot, mudder/modder, vul/vol, bulster/bolster, puls/pols, wulf/wolf, smeuren/smoren, speur/spoor ‘track’, veur/voor ‘furrow’, buk/bok, puk/pok, plug/plog, bucht/bucht ‘dirt’.*
- Always back: *boven, mot, pot, poten, gebod, bode, bodem, mos, most(erd), post, spot, bot, vos, bol, mol, molm, volgen, volk, wolk, spoor ‘spur’, boog.*
- G. WGm. \*CoCa
- Always front: *reuden (only F), bul ‘bull’, veugel ‘bird’, buchel ‘hump’.*
- Partly front: *euvel/kovel, pup/pop, schoppen/schuppen, schup/schop ‘kick’, bubbel/bobbel, dubben/dobber, duf/dof, juffer/joffer, lub/lob, tup/top; but/bot, dudder/door, gut/god, mudder/modder, zudde/zodde; dul/dol, krul/krol, vul/vol, bulster/bolster, kulk/kolk, puls/pols, sulfer/solfer, stulp/stolp, zeul/zool, wulf/wolf; smeuren/smoren, speur/spoor ‘track’, veur/voor ‘furrow’; buk/bok, juk/jok, kreukken/kroken, puk/pok, plug/plog, teugen/togen, bucht/bucht ‘dirt’, nuchter/nochter.*

Always back: *dop, hop, kloppen, knop, kop, koper, nop, open, sop, soppen, stoppen, strop, dobbe, kobbe, schrobben, slobben, stobbe, doft, grof, hof, lof, offeren, schoft, slof, stof, boven, loven, oven, stoof; lot, mot, otter, pot, poten, gebod, bode, bodem, drost, mos, most, os, post, slot, snot, spot, vloot, vlot, genot, bot, vos; bol, dol, hol, knol, kool, mol, schol, kolf, molm, zolder, volgen, volk, wolk; goor, schoren, spoor; blok, klok, knook, kok, koken, koker, lok, lokken, rok, schokken, slok, spinrokken, sok, stok, stoken, vlok, wrok, boog, drog, nog, rog, trog, zog, dochter, kocht.*

#### H. Old French loanwords with /o/

Always front: *kust* ‘coast’.

Partly front: *dubbel/dobbel, gum/gom, nummer/nommer, nun/non, tun/ton, sulfer/solfer, kusten/kosten.*

Always back: *koppel, som, stof* ‘stuff’, *zot, mosterd, pomp, blond, rond.*

#### I. Uncertain whether ODu. \*u (\*CuCi/j) or \*o (\*CoCV)

Always front: *geut* ‘pouring’, *bus* ‘forest’.

Partly front: *schuppe/schop, zeup/zoop, tobbe/tubbe, dutten/dodden, musk/mosk, bleuzen/blozen, heul/hol* ‘den’, *veulen/vool, bulgen/verbolgen, bukken/bokken, lugge/log, rugge/rogge.*

Always back: *stoppel.*

Some of these data allow for tentative conclusions. The sequence \*CuCu is too rare to permit a strong generalization, although we note that there are no words with only a back vowel reflex. The combination \*CunKV clearly favours the retention of a back vowel in coastal Dutch. The same is probably true for \*CunT as far as monosyllabic forms are concerned (*grond, blond, gezond, hond, hond-erd, mond*). In polysyllables (MDu. *begonde, bondel, zonde, munte, plund-, slonse, zonder*), we find fronting to *u* at least in some dialects, with a varying distribution. Thus, it is conceivable that the syllable structure played a certain role, favouring fronting in, e.g., *bon-del* with *n* in coda position, but favouring retention of the back vowel in *bond*, with syllable-final *nd*.

Before *m*, the syllable structure may also have played a role, viz. as regards open and closed syllables. Whereas fronting to *eu* can happen in open syllable in northern dialects (H *dreumel, dreum, H keumen, HZ zeumer*; an exception is the religious word *vroom*), there is no fronting if \**u* was originally followed by \**mp*, \**mb* or \**mm* (*brommen, hommel, om, dom, kom, lomp, stom, stomp*). In *som-* ‘some’, we must assume an original alternation between NOM.ACC. \**som* and OBL. \**somV-*. Conversely, in front of single *n* or original *nn*, we never exclusively find a back vowel. The vowel is either always fronted (especially if a lengthened vowel has

resulted), or it vacillates between front and back (*bun/bon*, *deun/donne*, *dunder/donder* < \**punar*, *zunne/zonne*, *zundag/zondag*, and the French loanwords *nunne/nonne*, *tunne/tonne*), in which case fronting is found particularly in Flemish.

In conclusion, some of the categories distinguished here seem to be relevant for the outcome of the vowel. Mostly, this concerns the following consonants. The vowel of the following syllable may be relevant in the sense that a following low vowel rarely combines with fronting throughout in coastal Dutch, and that a following \**u* always provokes fronting or partial fronting (but the evidence consists of only a few words). Since the main features of the West Germanic consonants which are most relevant (*m*, *n*, *nC*) did not change between West Germanic and Middle Dutch, this consonantal condition may refer to events that took place in Old Dutch or at a later stage. In that sense, this result takes us to the next subsection.

### **Summary 3. Vowel distribution according to the following consonant**

The subcategories for the following consonant in this section are the same as in § 15.3.1 and § 15.3.2, but I have slightly modified the order of the consonants. Here, I distinguish labial obstruents (A), *m* (B), dental obstruents (C), *n* (D), *n* plus dental consonant (E), *l* (F), *r* (G), velar obstruents (H), and *n* plus velar stop (I).

#### **A. Before labial obstruents**

Always *u*, *eu* or unrounding:

- p*    *kre(u)pel*.
- bb*    *kubbe, lubben*.
- v*    *de(u)vel, de(u)vik, heusch, heuvel/huffel*.

Always *o*, *oo*:

- p*    *koper, open*.
- pp*    *dop, droppel, hop, kloppen, knop, knop, koppel, nop, sop, stoppen, stoppel, strop*.
- bb*    *dobbe (SH,NH), kobbe (F), schobbe, slobben (F also oe), stobbe*.
- f(f)*    *dof, grof, hof, lof, offeren, schoft, slof, stof* ‘dust’, *stof* ‘cloth’.
- v*    *boven, loven, oven, stoof*.

Both attested:

- p*    *dreupel (F) / dropel, zeup (F) / zoop (H)*.
- pp*    *druppen / droppen (H), pup (F) / pop (FF,Z,H), up (F) / op (Z,H), schuppen (F) / schuppen (Z), schup (EF) / schop* ‘kick’, *schuppe (WF) / schop (FF,H)*.
- bb*    *bubbel (FF;WF) / bobbel, dubben (MDu.) / dobber, doebleen, dubbel (H) / dobbel (F,SH), lub (NH) / lob(be), tubbe (WF) / tobbe (EF), tup (Z,NH) / top (F;H)*.
- f(f)*    *duf / dof, joffer / juffer, knoffelen / knuffelen*.
- v*    *e(u)vel / oevel (H), keuvel (F,Z) / koovel (H)*.

In open syllables, pandialectal fronting is relatively frequent but not omnipresent: we find *kreupel*, *deuvel*, *deuvik*, *heuvesch*, *heuvel*, and, in modern dialects, *euvel*, versus a back vowel always in *koper*, *open*, *boven*, *loven*, *oven*, *stoof*. Four other words have fronting in Flemish but not in Hollandish (nor, sometimes, in French Flanders), viz. *dreupel*, *zeup*, *euvel* and *keuvel*. In closed syllables, a majority of forms has the back vowel, whereas the pervasive *u* of *kubbe* and *lubben* is not very significant since both words are poorly attested. A number of words with vacillating vocalism occur before *pp*, *bb* and *ff*, with fronting mostly concentrated in Flanders, but sometimes in Holland (*top*, *lub*, *dubbel*).

### B. Before m

There are twelve common words (*om*, *dom*, etc.) which always have a back vowel, and not a single word has a front vowel throughout. The seven vacillating words are *krom*/*krum* (*krum* only in southeastern Flanders), *gum* (a minority form, maybe from North Brabant), *nummer* (idem), with a short vowel, and *dreumel*, *dreum* (in Holland), *keumen* (Holland) and *zeumer* (Zealand and Holland) with a long one. Thus, we can clearly see that *m* favours the retention of *o* in a closed syllable. As for open syllable, the majority of the forms has fronting.

### C. Before dental obstruents

Always *u*, *eu* or unrounding:

- t* butter (FF,H) / *beuter* (WF,Z), *geut* ‘pouring’, *neut*.
- tt* *nutte*, *schuttel*, *schutten*, *geschut*, *stutten*.
- d* *beu(de)l*, *reu(de)*, *reuden* (F).
- dd* *kudde*, *mudde*.
- s* *bus(k)*, *dus*, *kust* ‘choice’, *kust* ‘coast’, *lust(en)*.
- z* *reuzel*.

Always *o*, *oo*:

- t* *poten*, *vloot*.
- tt* *lot*, *mot*, *otter*, *pot*, *slot*, *snot*, *spot*, *vlot*, *zot*, *genot*, *bot* ‘bone’.
- d* *(ge)bod*, *bode*, *bodem*.
- dd* *slodderen*.
- s* *drost*, *mos*, *most(er)*, *os(se)*, *post*, *vos*.

Both attested:

- t* *geut* (H)/*goot*, *sleutel*/*slotel* (FF,WF,Z).
- tt* *but* (WF,ZF)/*bot*, *butte*/*botte*.
- dd* *dutten*/*dodden*, *dudder* (FF)/*dodder*, *gut* (H)/*god*, *mudder* (NH)/*modder*, *schudden*/*schdden* (Z,H), *zudde* (H)/*zodde*.

- s    *busse* (WF,Z,H)/*bosse* (EF,Z,H), *bussel* (EF,Z,H)/*bossel* (H), *kussen/kossen* (Z,SH) ‘kiss’, *kussen/kossen* (Z,SH) ‘cushion’, *kusten* (NH)/*kosten*, *muske* (F)/*mosk* (Z,H), *mussel* (FF,WF)/*mossel*.
- z    *bleuzen* (F,Z)/*blozen*, *euzie* (EF)/*oozie* (FF,WF,NH), *kneuzen/cnoosen* (H), *neus/ noos* (NH).

In closed syllables, the back vowel tends to be better preserved in monosyllabic words (*lot, mot, drost, most*, etc.) than in polysyllabic ones (*nutte, schuttel, kudde*), but there are exceptions to both of these tendencies. In open syllable, there seems to be a slight preference for fronting (*beuter, geut, neut, beul, reu, reuden* vs. *poten, vloot, bode, bodem*). In Flanders, the number of fronted forms is higher than in Holland.

#### D. Before n

Before *n*, we find vacillation in *bun, beun* (Z,H) vs. *bon*. There are no forms with only a back vowel, whereas there are no less than twelve words which always show fronting of the lengthened vowel: *Beunen* (F,H), *deun, deunen, dreunen, heuning, keunen* (F,Z,H) / *kunnen, keuning, munnik / meuninck, steunen, geweun, weunen, zeun*. Thus, what is a weak tendency before labial obstruents and *m* is almost a rule before *n*, such that fronting is the dominant outcome in open syllable.

#### E. Before n plus dental consonant

Always *u*:

none.

Always *o*:

*blond, bond, gezond, grond, hond, honderd, mond, rond, stonde.*

Both attested:

- nd    *begunde* (FF,WF)/*begonde, bundel* (H)/*bondel* (F), *plund-* (WF,NH?)/*plond-*, *dunder(dag)* (FF,WF,Z)/*donder(dag)* (H), *zundag* (F,H)/*zondag, zunde* (H arch.)/*zonde, zunder* (SH?)/*zonder.*
- nt    *munt/mont* (SH).
- ns    *slunse* (F)/*slons.*
- nn    *tun* (FF,WF,Z)/*ton, zun* (FF,WF,Z)/*zon, nun* (WF,NH)/*non* (Z).

The words with *o* are mostly monosyllables, as we have observed in summary 2. In most of the twelve originally polysyllabic words with vowel vacillation (*zunne/zonne* ‘sun’, etc.), Flanders (sometimes with Zealand) has the front vowel, viz. in *begunde, dunder(dag), munt, nunne, plund-, slunse, tunne, zunne, zundag*. Hollandish has the front vowel in *bundel* and *zunde*.

## F. Before l

Always *u, eu*:

- l*    *heul* 'ditch' (F,Z,H), *Keulen*, *m(e)ul*.
- ll*    *bul* 'bull', *hulle* 'case', *hullen* 'to cover'.
- lC*    *bult*, *gulden*, *hulde*, *hulst*, *zult*.

Always *o, oo*:

- l*    *kool*.
- ll*    *bol*, *dol* 'thole', *hol* 'hollow', *knol*, *mol*, *schol*.
- lC*    *kolf*, *molm*, *zolder*, *volgen*, *volk*, *wolk*.

Both attested:

- l*    *heul* (SH) / *hol* 'den', *meulen* (F,Z,H) / *molen* (H,U), *veulen* (EE,SH) / *vool* (Tholen,NH), *zeul* (F,Z,SH) / *zool*, *zeule* (F,Z) / *zole* (FF,WF,northern Z).
- ll*    *dul* (F,Z) / *dol* 'mad', *krul* (F,Z,H) / *krol* (H), *vul* (F) / *vol*, *vullen* / *vollen* (H), *wullen* (MDu.F) / *wollen*.
- lC*    *bulgen* (F,Z,H) / *verbolgen*, *bulster* (F,H) / *bolster*, *kulk* (SH) / *kolk*, *puls* (F?) / *pols*, *schuld* (F) / *schoud* (H), *sulfer* (WF,Walch.) / *solfer* (Z,SH), *stulp* / *stlop* (NH), *wulf* (F) / *wolf*.

Before *l*, lengthened vowels show a preference for fronting to *eu*, which is either found always (in *heul*, *Keulen*, *meul*) or in a larger number of dialects, particularly in southern coastal Dutch (*heul*, *meulen*, *veulen*, *zeul*, *zeule*). Before *ll* and *lC*, wherever the vocalism vacillates between *u* and *o*, we find the front vowel in (part of) Flanders, sometimes also in Zealand and South Holland. As regards *lC*, there is a complementary distribution between *l* plus dental obstruent and *l* plus labial or velar consonant. In the former context, the vowel is either always fronted (*bult*, etc.; with the exception of *zolder* < \**zolre*), or it is fronted in a large part of the dialects, particularly in Flemish (*bulster*, *puls*, *schuld*). Before *lP* and *lK*, however, the vowel has remained a back vowel everywhere (*kolf*, etc.), or at least in part of the dialects, in particular, in Holland (*solfer*, *stlop*, *wolf*, *kolk*).

## G. Before r

Only *eu*:

*beuren*, *deur*, *keur*, *keuren*, *speuren*, *steur*.

Only *oo*:

*gloren*, *goor*, *schoren*, *spoor*.

Both attested:

*scheur*, *scheuren* (F,Z) / *schoor*, *schoren* (Z,NH) 'to tear', *smeuren* / *smoren*, *speur* (WF,Z) / *spoor* 'track', *veur* (WF,Z,H) / *voor* (FF,NH) 'furrow'.

Again, where we find vacillating fronting, it is mostly Flanders that has the front vowel (*scheur*, *scheuren*, *speur*, *veur*), and especially West Flanders.

## H. Before velar obstruents

Always *u, eu*:

- k* *breuk, kneukel, neuken.*
- kk* *drukken* (F).
- g* *beugel* ‘clasp’, *deugd, heugen, jeugd, veugel, vleug, zeug.*
- gg* *stug* (only Z,H), *vlug* (F,H).
- ch* *buchel* ‘hump’, *berucht, gehucht, gerucht, vluchten, zucht* ‘disease’ (F).

Always *o, oo*:

- k* *knook, koken, stoken.*
- kk* *blok, brok, klok, kok, lok, lokken, rok, schokken, slok, spinrokken, sok, stok, vlok, wrok.*
- g* *boog.*
- gg* *drog, nog, rog* ‘ray’, *trog, zog* ‘wake’.
- ch* *dochter, kocht.*

Both attested:

- k* *keuken / kooken* (Goeree), *kreuken / kroken* (Z,H), *peuken peuk* (WF,H) / *poken, reuk / rook* (Z,SH), *spreuk / sprook* (H).
- kk* *buk* (F) / *bok, bukken* (F) / *bokken* (Z,NH) ‘to stoop’, *druk* (F) / *drok* (Z, NH), *juk* (H) / *jok* (EZ), *jeuken, jukken* (EWalch.) / *jokken, joeken* (FEZ,SH), *geluk* (NH) / *lokken, gelok* (Z,SH), *plokken* (Z,SH,NH, spor. F) / *plukken, puk* (H) / *pok, pukkel / pokkel, rukken* (EZ) / *rokken* (Z,SH,NH), *sukkel(en)* (F,H) / *sokkel(n)* (Z).
- g* *leugen / loogen* (arch., SH), *meug* (F) / *moog* (Z,H) ‘may’, *teug / toog* (NH), *teugel / togel* (NH), *teugen / togen, vleugel / vlogel.*
- gg* *lugge* (F) / *log, mug / mog, mohhe* (Z,H), *plug* (F,NH) / *plog* (Z), *rugge* (FF,WF) / *rogge* ‘rye’.
- ch* *bucht* (WF,Z) / *bocht* ‘bend’, *bucht* (F) / *bocht* ‘dirt’, *klucht* (Z) / *kloft, kluft* (NH), *lucht* (F) / *locht* (Z,H), *nuchter* (F) / *nochter* (Z,NH), *(n)uchtend* (F) / *(n)ochtend* (Z), *tucht* (F) / *tocht* (H), *vucht* (Early MoDu.) / *vocht, vrucht* (F,H) / *vrocht* (SH,U), *zuchten / zochten* (SH).

Vowels in open syllable yield *eu*, either in all dialects (viz. *breuk, kneukel, neuken, beugel, deugd, heugen, jeugd, veugel, vleug, zeug*) or at least in West Flanders (viz. *in jeuken, keuken, kreuken, reuk, spreuk, leugen, meug*), and often also in Zealand and Holland (*peuken, teug, teugel, teugen*). The exceptions are *knook, koken, stoken*, and *boog*, which always have a back vowel.

If the vowel is short, we find a predilection for fronting before *cht*. Where the vowel vacillates between front and back, front *u* is found in Flanders and sometimes also in Zealand (*bucht, bucht, klucht, lucht, nuchter, nuchtend, tucht, vucht, vrucht, zuchten*) whereas Holland and often also Zealand mainly show *o*.

In closed syllable, the back vowel has a stronger position, with invariant *o* in many words. Where there is variation, *u* is more frequent in Flanders than in Holland, viz.

in *buk, bukken, druk, jukken, plukken, rukken, sukkelen* before *kk* and in *mug, lug, plug, rugge* before *gg*. Note that North Holland sometimes has the same variant as Flanders, as in *plug* and *kluft*. Fronting is the only attested variant in *stug* and *vlug*.

### I. Before n plus velar stop

Here, the evidence is quite straightforward. Retention of the back vowel is the rule, which is only broken by Hollandish *dunken* beside *donken* ‘to think’. No word has a front vowel everywhere.

### J. Conclusions

Fronting is found more frequently in lengthened vowels than in short vowels. This tendency is very clear before single *n* (*Beunen, deun, deunen, dreunen, heuning, keunen, keuning, meuninck, steunen, geweun, weunen, zeun*) and before *k* and *g* (*breuk, kneukel, neuken, beugel, deugd, heugen, jeugd, veugel, vleug, zeug* vs. *knook, koken, stoken, boog*). Fronting is furthermore dominant in open syllables before labial obstruents (*kreupel, deuvel, deuvik, heuvesch, heuvel, euvel*, vs. *koper, open, boven, loven, oven, stoof*), and before *l* (*heul, Keulen, meul* vs. *kool*). Before dental obstruents, the preference for fronting in open syllables is less pronounced but still visible (*beuter, geut, neut, beul, reu, reuden* vs. *poten, vloot, bode, bodem*), and the same is true before *r* (*beuren, deur, keur, keuren, speuren, steur* vs. *gloren, goor, schoren, spoer*).

Where the lengthened vowel vacillates geographically between front and back, *eu* is often confined to Flemish (and not always to all of Flemish), viz. before labials (*dreupel, zeup, euvel, keuvel*), *l* (*heul, meulen, veulen, zeul, zeule*), *r* (*scheuren, smeuren, speur, veur*), and velars (*jeuken, keuken, kreuken, reuk, spreuk, leugen, meug*). Fronting is more typically Hollandish before *m* (*dreum, dreumel, keumen, zeumer*).

Retention of *o* is the rule in closed syllables before labial obstruents, before *m*, mostly before *lP* and *IK* (particularly in Holland, less so in Flanders), and before *nK*. The back vowel also tends to be retained before dental obstruents, but only in monosyllabic words (*lot, mot, drost, most*, etc.). A similar distribution is found before the cluster *nT*, where *o* is retained in monosyllabic words (*blond, bond, gezond, grond, hond, honderd, mond, rond, stonde*), but fronted to *u* in most of the polysyllabic words, at least in Flanders (*begunde, dunder(dag), munt, nunne, plund-, slunse, tunne, zunne, zunday*). Before *kk* and *gg*, short *o* is also dominant; where there is variation, *u* is more frequent in Flanders than in Holland (*buk, bukken, druk, jukken, plukken, rukken, sukkelen, mug, lug, plug, rugge*).

Fronted *u* is the general reflex before *lT* (*bult, gulden*, etc.), sometimes only in Flemish (*bulster* and others). Before *cht* fronting is also the dominant development (*buchel, berucht, gehucht, gerucht, vluchten, zucht* vs. *dochter, kocht*), but in a number of forms, Flemish *u* contrasts with Hollandish *o* (*bucht, bucht, klucht, lucht, nuchter, nuchtend, tucht, vucht, vrucht, zuchten*).

This section, then, has yielded a reasonably clear result. Open syllables generally favour fronting to *eu*, whereas closed syllables favour the retention of *o* at least before labial and velar consonants, including the clusters *lP*, *lK*. Dental obstruents and the clusters *nT*, *nn* favour retention of *o* in a closed syllable too, but if the cluster was split over two syllables (i.e., followed by a vowel), fronting is found. Fronting is also dominant before *cht*. In general, Flemish shows many more fronted exceptions to these rules than Hollandish.

#### **Summary 4. Geographic distribution of the fronted vowel reflexes**

The preceding summaries have already yielded some indications as to the geographic distribution of fronting. Here is a more fine-grained division:

A. Fronting in all of coastal Dutch:

*kreupel, deuvel, deuvik, euvel, heus, heuvel; beul, keutel, neut, reu, scheut, butter/beuter, geut; neus, reuzel; beugel, breuk, deugd, heug(en), jeugd, kneukel, kreukel, neuken, vleug, zeug, teugen, veugel; weunen, heuning, keunen, steunen, zeun, beun/bun, deun, deunen, dreunen, keuning, geweun; heul; beuren, deur, keur(en), sleuren, speuren, steur, deur;*  
*kubbe, lubben; kudde, mudde, nutte, geschut, schutten, stutten, schuttel; stug, vlug; berucht, gehucht, gerucht, klucht, vluchten, buchel, vlucht, zucht ‘disease’; dunken; kunde, nun, zundag, munnik; bult, dulden, gulden, hulde, hulle(n), hulst, m(e)ul, schuld, zult, bul, bulgen, bulster, krul; dus.*

B. Fronting in most of coastal Dutch but not in North Hollandish:  
*teugel.*

C. Fronting in (all of) Flemish, most of Zealandish and maybe (part of) South Holland:

*druppen; rukken; vullen, meulen, veulen (traces of oo on Tholen and in WF), zeul ‘sole’; tun, zun, dunder; veur ‘furrow’ (but oo in FF).*

D. Fronting in (all of) Flemish but not further North:

*schudden, reuden; kussen ‘kiss’, kussen ‘cushion’, mus(k); bukken, druk, drukken, geluk, mug, sukkel(en); reuk; nuchter, uchtend, tucht; vul, wulle; scheur(en); zeup.*

E. Fronting in (central) Flemish, maybe also southern Zealand, but not in all dialects of Flemish:

*busse, bussel, bus, mussel, bleuzen; druppel (F except westernmost FF, Z, NH); schuppen (Ghent, Waasland), up, pup, schup, schuppe; schubbe, bubbel, tubbe; keuvel; plukken, buk, rugge ‘rye’, bucht ‘bend’, bucht ‘dirt’, peuke ‘a thrust’; but (a fish); krum (SE-F); begunde, sluns; dul, puls, sulfer, wulf, zeule; speur ‘track’.*

F. Fronting in Zealandish and Hollandish but not in Flemish:  
*zeumer.*

- G. Fronting in (South and) North Hollandish but not in Flemish:  
*dubbel, lub; gut!, sleutel; mudder, zudde; kusten* ‘to cost’; *kulk, stulp; dr(e)um, keumen.*
- H. Fronting in many dialects, especially in Flanders and North Holland, but relic forms with back vowel especially in SH and FF:  
*vrucht* (*vrocht* only in rural SH); *munt* (*mont* in rural SH); *mug* (*moch* in SH); *lucht* (*locht* in northern Z, SH islands and rural SH); *jeuken, jukken* (back vowel in FF, Z, rural SH); *keuken* (*oo* in Goeree); *leugen* (*oo* in Aalsmeer, Moordrecht).
- I. Otherwise:  
*zonde* (*zunde* in rural SH); *top* (*tup* in central Z and NH); *plund-* (F and NH); *euzie* (EF, H?); *dudder* (only FF).

#### J. Conclusions

Clearly, Flanders, and particularly West Flanders, represents the core area of fronting. French Flanders is excepted in a number of cases, which can only be interpreted as the retention of the back vowel in dialects which had become peripheral with regard to the main urban centres of West Flanders in the Middle Dutch period (Ryckeboer 1991). In East Flanders, some words join West Flanders in the fronting of \**u*, whereas others show a back vowel in some or all dialects, increasingly so as one goes east. It seems certain that, in a number of words, all of Flanders originally had a front vowel which was pushed back by the general Brabantish influence on East Flemish after 1500. But it is unclear whether this applies to all words, or whether some East Flemish words never had fronting in the first place.

The islands of Zealand for the most part join West Flemish in the vowel fronting but there are some exceptions. Sometimes, Zealand (and occasionally also more archaic dialects of Holland) preserve the back vowel, just like French Flanders, as in *jeuken, lucht*. Conversely, there are also some words where Zealand (with Holland) has fronting as opposed to Flanders, as in *zeumer* ‘summer’.

The standard language has greatly influenced the geographic distribution, especially in the Netherlands.

#### 15.3.5 Interpretation

We have seen that none of the main factors which may have influenced the outcome of \**u* was decisive. Neither *i*-mutation, nor *a/u*-mutation, nor the syllable structure, nor the surrounding consonantism can on their own explain the attested distribution. Nevertheless, a few tendencies were found: a majority of around 80% of the *i*-mutated words shows fronting throughout; a following \**u* also favours fronting,

as opposed to a following \*a; lengthening in open syllable often combines with fronting to eu; and closed syllables favour the retention of o at least before labial and velar consonants and before lP, lK. Dental obstruents and the clusters nT, nn also favour retention of o in a closed syllable, but if the cluster was split over two syllables (i.e., followed by a vowel), the vowel is fronted. Fronting is also dominant before cht.

### *The main factor: Old Dutch \*u*

Most scholars agree on the importance of the distinction between WGm. \*u and \*o for the unconditioned fronting in western Dutch. Fronting would have taken place only in words which retained stressed \*u in Late Old Dutch, and not in words where the vowel was lowered to \*o. The distribution of WGm. \*u in the early-medieval western Low Countries would have been more of the Anglo-Frisian and Old Low Franconian kind, with \*u after labial consonants (*wulf, veugel*), before single nasal consonants (*zeumer, leunen*), and before high \*u in the next syllable (*zeun, lust*). The influence of i-mutation is judged differently by different scholars, but it is clear that i-mutation factors and \*u share the articulatory feature of [+high], which may explain the retention of stressed high \*u in both cases. It would be unremarkable if stressed \*u remained a high vowel both before a front high vowel (\*i, \*j, \*ī) and before \*u. Another condition which is often discussed in this respect is that a preceding labial consonant could have had the same effect as a following nasal consonant. In other words, the lowering of \*u to \*o could be blocked by i-mutation, by u-mutation, by the influence of labial consonants, and by following nasals.

We can now investigate whether the exceptions that we found for each of the conditioning factors discussed above (in summaries 1 to 4) can be understood using one of the other likely factors for the retention of \*u.

#### a. *i-mutation*

In summary 1, we have seen that thirteen words which have fronting throughout did not have an i-mutation factor, and that fifty-six words without an i-mutation factor have partial fronting. Table 41 indicates whether the relevant words can be explained via one of the other potential \*u-conserving factors.

The words *dus* and *up* are given under u-mutation because they did not have a following vowel, so that they were not subject to lowering by a-mutation.

#### b. Preceding labial

In summary 2, we have found twenty-one words with a labial consonant preceding \*u which never show fronting. None of these words had an i- or u-mutation factor or a following nasal:

*boven, mot, pot, poten, gebod, bode, bodem, mos, most(erд), post, spot, bot, vos, bol, mol, molm, volgen, volk, wolk, spoer ‘spur’, boog.*

c. In open syllable

In summary 3, it was found that lengthened vowels in open syllable very often yield *eu*. In Table 42, we investigate whether the nature of the West Germanic vowel in the unstressed syllable was also influential:

Table 41. Absence of *i*-mutation combined with factors favouring \**u*

	<i>u</i> -mut.	<i>P</i> _	<i>N</i> _	<i>NC</i> _	other
always fronted	<i>dus, zeug</i>	<i>beuter, geweun,</i> <i>weunen, bul,</i> <i>veugel, buchel</i>	<i>heuning,</i> <i>geweun,</i> <i>steunen,</i> <i>weunen,</i> <i>zeun</i>		<i>kust (&lt; French), reuden</i>
partially fronted	<i>up, lucht,</i> <i>vrucht,</i> <i>uchtend</i>	<i>pup, bubbel, but,</i> <i>mudder, vul,</i> <i>bulster, puls, wul,</i> <i>wulf, smeuren,</i> <i>speur, veur, buk,</i> <i>puk, bucht</i>	<i>keumen,</i> <i>zeumer</i>	<i>dunken, krum,</i> <i>gum, nummer,</i> <i>dunder, plund,</i> <i>nun, sluns, tun,</i> <i>zun, zundag,</i> <i>zunder</i>	<i>schuppe, schup, dubben,</i> <i>dubbel, lub, tup, duf, juffer;</i> <i>dudder, gut, zudde; kusten;</i> <i>dul, krul, kulk, sulfér, stulp,</i> <i>zeul;</i> <i>juk, kreiken, plug, teugen</i>

Table 42. Open syllable lengthening combined with factorsavouring and disfavouring \**u*

fronting	<i>i</i> -mutation	<i>u</i> - or <i>a</i> -mutation	other
always	<i>kre(u)pel, de(u)vel, de(u)vik, heusch,</i> <i>heuvel, neut, beu(de)l, reu(de), reuzel,</i> <i>beuren, deur, keur, keuren, speuren,</i> <i>steur, scheur, scheuren, Beunen, deun,</i> <i>deunen, dreunen, keuning, munnik /</i> <i>meuninck, heul, Keulen, m(e)ul, breuk,</i> <i>kneukel, neuken, beugel, heugen, vleug,</i> <i>reuk, sprek</i>	<i>u</i> -mutation: <i>zeun, zeug, deugd,</i> <i>jeugd</i>	<i>beuter, heuning,</i> <i>keunen, steunen,</i> <i>geweun, weunen</i>
partially	<i>dreupel, zeup, e(u)vel, keuvel, dreum,</i> <i>dreumel, sleutel, geut, bleuzen, euzie,</i> <i>kneuzen, neus, meulen, veulen, keuken,</i> <i>leugen, teug, teugel, vleugel</i>	<i>a</i> -mutation: <i>speur, veur, smeuren,</i> <i>kreukan, peukan,</i> <i>teugen</i>	<i>keumen, zeumer,</i> <i>reuden, heul,</i> <i>zeul, zeule, veugel</i>
never		<i>a</i> -mutation: <i>koper, open, boven,</i> <i>loven, oven, stoof,</i> <i>poten, vloot, bod,</i> <i>bode, bodem, kool,</i> <i>gloren, goor, schoren,</i> <i>spoor, knook, koken,</i> <i>stoken, boog</i>	

Table 42 shows that the majority of the long-vowel forms with fronting have *i*-mutation or *u*-mutation, or (in the column ‘others’) a preceding labial or a following single nasal consonant. Conversely, the long-vowel forms with a back vowel throughout mostly contained a low vowel in the next syllable in West Germanic. The table thus confirms that the early-medieval distribution of \**u* and \**o* according to the criteria found in Anglo-Frisian and in Old Saxon is a more plausible explanation for the unconditioned fronting than any of the individual factors discussed in the summaries to to 4 above. Those words that kept \**u* and resisted lowering to \**o*, were later most liable to be fronted in western Dutch by the “unconditioned” fronting. The exceptions in this table (*kreuken*, *peuken*, *teugen*, *reuden*, *heul*, *zeul*, *zeule*) are few, the etymology of the exceptions is not always completely certain, and not all of them are reliably attested in old texts and/or in a larger part of the western dialects.

### *Geography*

Geographically, Flemish in general shows many more fronted exceptions to these rules than Hollandish. It is another matter whether unconditioned fronting was less frequent in Holland than in Flanders to begin with. This is assumed by van Loon (2014: 168), and it seems the evident conclusion at least for those words which are not even found with fronting in all of Flemish. In other words, there would have been a West Flemish core area of unconditioned fronting, as argued also by Taeldeman (1971: 228, 266). But there are also words in which fronting is found in Holland but not in Flanders; and within Holland, fronting is beating the retreat on a number of accounts. Hence the difference between Holland and Flanders in matters of fronting of \**u* may in, say, 1200, have been much smaller than in later centuries.

### *Relative chronology*

Van Loon (2014: 169–70) assumes that the fronting of \**u* pushed the old \**ü* to be unrounded to \**i* in the type *brigge*, etc. Because he tentatively dates unrounding of \**ü* to the ninth century, the fronting of \**u* would have to be dated a bit earlier or contemporaneously (2014: 170). Yet I have arrived at a different, more restricted explanation for the coastal unrounding of \**ü* in § 15.2.5, which implies that it was not causally linked to the general fronting of \**u*. Also, whereas the eastern isogloss of both changes appears originally to have been the same (the Dender-Scheldt-border between Flanders and Brabant), the western isoglosses do not coincide, because fronting of \**u* did not always spread to westernmost Flanders, Zealand or Holland, whereas unrounding of \**ü* is found in all of coastal Dutch in exactly the same words. On geographical grounds too, therefore, I regard fronting of \**u* as the more recent phenomenon.

I agree with van Loon that the eastern limit of fronting of \**u* may well be due to the existence of morphological *i*-mutation in inland Dutch, which blocked a general merger of \**u* and \**ü* there (p. 173).

A different explanation is given by Van Loon on p. 207–8, where he proposes to link the fronting of \**u* to the general lowering (or, as it is sometimes called, centralization) of Old Dutch \**i*, \**ü*, \**u* to [i, ʌ, ɔ], the forerunners of the modern pronunciations of these phonemes. Van Loon roughly dates this tendency to the eleventh century, starting earlier before *r* and spreading latest to prenasal position, where the high vowel [u] has been retained or restored in a number of dialects. In the standard language, \**u* and \**o* have merged, but in many Dutch dialects, they are distinguished, either because they remained different, or because they first merged and then underwent a secondary split (Goossens 2010). Van Loon now explains the western, “unconditioned” fronting of \**u* as an alternative direction in which the vowel developed in order not to merge with old \**o*. The vowel was not lowered to \**v* but (lowered and) fronted to \**ʌ*. This would amount to a knock-off change in order to avoid too much lexical load of the phoneme /o/ (p. 208). This would have happened in the eleventh to twelfth centuries, and the fronting would have to be dated before open syllable lengthening for two reasons: (1) After open syllable lengthening, the pressure on the phoneme short /o/ had diminished (*open*, *boven*, etc. acquired a long vowel); (2) If \**u* had first become [o] in \**sumar*, \**sunu*, etc., lengthening would have yielded /o:/ across the board (as it did when Old Dutch \**o* was lengthened in *boven*, *open*, etc.) and not /ø:/ as in *zeumer*, *zeun*, etc.

On the other hand, it seems likely that fronting of \**u* post-dates the lowering of \**ulT* to *olT*, thereby predating the *l*-vocalization of \**olT* to *ouT*, which in Flanders took place around 1150 (van Loon 2014: 235). For instance, MDu. *scout* ‘guilt’ < \**skolt* < \**skuldi-*, *scouder* ‘shoulder’ < \**skolder* < \**skuldrō-*, etc. had a mid back vowel *o* when *l* was vocalized around 1170 in Flanders. Of course, we cannot be certain that \**u* in this position would otherwise have been fronted, but certainly in Flanders, we later observe fronting before *IC* (as we observe in *gulden*, *puls*, *bulgen*, etc.).

Since vowel mergers are frequent events, and since languages have no teleological capacities, I object to van Loon’s claim that \**u* was fronted in order not to merge with \**o*. Instead, I propose the following scenario. In a number of dialects, the opposition between \**u* and \**o* had become one between [v] and [ɔ]. The higher member of this pair was then fronted to [ʌ] or [y] in many words, particularly in open syllable and (in closed ones) before dental consonants. There could have been two major causes of this fronting. (1) The fronting may be a systemic consequence of the fronting of long \**ü* to ȳ in Flemish (on which see the next chapter). The latter fronting must at least predate the year 1187 (van Loon 2014: 214), but may well have been a century or more earlier. In this scenario, the short-vowel system would have imitated changes occurring in the long-vowel system. (2) Certain consonants, such as dentals, can have a palatalizing effect on vowels.

The preponderance of fronting in lengthened vowels may just be an indirect reflex of the fact that *i*-mutation and *u*-mutation are much more frequent in open syllables than in closed ones, e.g. in light *i*-stems and *u*-stems, in *ila*-derivatives, in part of the paradigm of *jan*-verbs, etc.

However, there may also have been a more systematic background. In Old and Middle Dutch, the long-vowel system was more crowded than the short-vowel system. Especially among the back vowels, where there is less oral space for differentiation than among the front vowels, this can lead to centralization or fronting of one of the members of the system. Before fronting of \**ū* to *ȳ* and before open syllable lengthening, Dutch dialects had three different rounded back vowels as reflexes of WGm. \**ū*, \**ō* and \**au* (of which the second or the third often had a diphthongal character, such as [uo]), to which open syllable lengthening of \**u* and \**o* would have added a fourth and, in some dialects, a fifth long rounded vowel.

It is not unusual for long back vowels to be fronted while their short counterparts remain backed. In the dialect of Hasselt in Belgian Limburg, which productively unrounds old front rounded vowels that resulted from *i*-mutation, WGm. \**u* and \**o* are reflected as /o/, /u/ when they remained short, e.g., /vos/ ‘fox’, /mond/ ‘mouth’, /sxup/ ‘spade’, /hɔ:t/ ‘wood’ (with *l*-vocalization), but in open syllable, unmutated \**u* and \**o* have been fronted to long /ø:/; /vø:yəl/ ‘bird’, /bø:və/ ‘above’. Similarly, WGm. \**ū* has been fronted to /œ:/, and WGm. \**aw* has been monophthongized and become /ø:/; /dœ:f/ ‘pigeon’, /strœ:k/ ‘bush’, /rø:/ ‘raw’ (Staelens 1989). This fronting is part of a general tendency in the productively unrounding dialects of Belgian Limburg to centralize and front all Early Middle Dutch long back vowels, a development probably due to the disappearance of the earlier front rounded vowels by unrounding (Goossens 2013: 41–6). Other examples of fronting being restricted to long vowels include many Lombardian, Piemontese and Ligurian dialects of Italian, e.g. the Milan dialect, where Romance \**ø* is retained as such in closed syllables (except before palatal consonants) but fronted to *ö* in open syllables: *fök* ‘fire’ (\**føki*), *kös* ‘cooks’ (\**køki*), *föra* ‘outside’ (\**føra*) vs. *kørno* ‘horn’, *søpp* ‘cripple’ (Rohlf 1966: 142).

I thus arrive at the following relative chronology of changes for western Dutch:

1. Loss of unstressed *a*-vowels
2. Phonologization of \**u*/ versus \**o*/
3. Loss of unstressed \**j* and (short) \**i*
4. Lowering of \*[*u*] to [*v*].
5. Lowering of \*[*v*] to [*o*] before *lT*, ca. 1100–1150 (MDu. *scout*, *scouder*).
6. Fronting of \*[*v*] to [*ʌ*] or [*y*].
7. Open syllable lengthening of short vowels.

### General conclusion

I conclude that the “unconditioned” fronting of WGm. \**u* only took place in words which had retained the high vowel \**u* in the Old Dutch period, as opposed to other words where lowering to \**o* had taken place. The main factors which favoured the retention of high \**u* were, (a) the presence of \**u* in the next syllable, (b) the presence of an *i*-mutation factor in the next syllable, (c) a preceding labial consonant, (d) a following nasal consonant. The geographic distribution of the fronted and unfronted vowels can to a large degree be explained by assuming that (West) Flanders was the core area of the innovation, and that, after ca. 1100, Holland lost previously fronted variants to a larger degree than Flanders.

It follows from the relative dating that the fronting of \**u* cannot be the direct result of a language shift of speakers of a different L1, such as Proto-Frisian or Gallo-Romance, to Old Franconian around the ninth or tenth century. Since the distribution of \*[u] which we assume for Old Dutch is very similar to that found in Old English, Old Frisian and Old Saxon, the Dutch developments could still be explained as the result of a language shift from Proto-Frisian to Old Franconian, with the imposition of the former’s distribution of \**u* and \**o* onto the latter (as assumed by Buccini). But there is no pressing need to posit a substrate and a language shift. Instead, we could assume that the western dialects of Old Low Franconian developed the same (originally allophonic) distribution of \**u* and \**o* as did Old Saxon and Proto-Frisian, their neighbours in the Low Germanic dialect continuum. In fact, there would have been several centuries, roughly between 450 and 900, for this similarity to develop. Consequently, the western Old Dutch distribution of \**u*, which in turn predicts which words get unconditioned fronting to [ʌ] in Late Old Dutch and Middle Dutch, is the result of an internal, western Dutch development.

## WGm. \**ū*

The modern dialect map with the Dutch reflexes of WGm. \**ū* essentially shows three stages of development, viz. the preservation of /u:/ (in eastern Dutch), its fronting to /y:/ (in central and western Dutch), and the diphthongization of the latter to *ui* in central Dutch (ANKO 1977: 16–29, FAND II/III: 150). The modern situation suggests that the back vowel was first fronted in all of western and central Dutch and subsequently diphthongized in Brabant, Utrecht and Holland, at the same time when MDu. *i* <*ij*> was diphthongized to /eɪ/.<sup>150</sup> The main issues to be discussed here are (1) the time at which \**ū* became /y:/, (2) the earliest geographic distribution of this fronting, (3) the alleged presence of *oe*-relics in coastal Dutch.

### 16.1 Period and conditioning of the fronting

It is disputed in which period the fronting of \**ū* to /y:/ took effect, and it is also unclear what its original geographic domain was. Van Loon (2014: 213–9) dates the fronting in the southwest to the second half of the twelfth century, but a precise chronology cannot be given since the spelling <*u*> is uninformative. He thinks that open syllable lengthening, which increased the number of long back vowels in the system, may have been the ultimate cause of the fronting of \**ū*.

It may be useful to recall the difference in phonology and graphemics between eastern Dutch – where rounded back vowels systematically had a front rounded counterpart due to secondary *i*-mutation – and western Dutch – where *i*-mutation of \**u* did not apply. As a result, the Latin letters <*o*> and <*u*> were used for a larger number of phonemes in the east than in the west (Goossens 1997: 167–9), and they were partly used for different etymological vowels. Before vowel length was systematically conveyed by the spelling, western Dutch, as exemplified by the graphemic system of the Ghent Leprosy documents of 1236, used <*o*> for short /o/, long /o:/ (from \**au*), long /o:/ (from \**o*, \**u* with open syllable lengthening),

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<sup>150</sup>. The fronting of /u:/ to /y:/ and its further diphthongization are among the most frequently discussed sound changes of Dutch. In 1927, Kloeké built his theory of the eastward Hollandish expansion on the progress of the shift of *oe* to *uu* and *ui*. The topic has since been discussed in every handbook on the historical phonology of Dutch, as well as in many articles.

and for the diphthong /oə/ (from WGm. \*ō), at least in open syllable; and it used the grapheme <u> for short /y/ and long /y:/ (Larsen 2001: 319–27). As we can see, the sign <u> is not used for a phoneme with /u/-quality, since in fact such a vowel did not exist in the system. Very differently, the Munich fragments of the Servatius legend, which can be dated to around 1200 and represent southeastern Dutch, have <o> representing the phonemes short /o/, long /o:/ (from \*ō), /ø:/ (*i*-mutation of the previous vowel), /ɔ:/ (\*au), and /ɔ:/ (*i*-mutation of \*au), and they employ <u> for short /u/ and /y/, for long /u:/ (from \*ū) and /y:/ (from \*iu and from *i*-mutation on \*ū), and for the diphthongs /uo/ and /yø/; see Goossens 1992b: 40–43. In the course of the subsequent centuries, there is a gradual increase of the explicit notation of vowel length (usually by adding *i* or *e*, e.g. <oi> or <oe> for /o:/; digraphs of the type <oo> were slower to develop), and the graphemic separation of front and back rounded vowels (e.g. *ue* for /y:/, *ou* or *oe* for /u(:)/). The latter difference only acquired systematic expression in spelling in the sixteenth century.

As to the geography, the modern, structural dialect border between /y:/ and /u:/ as reflexes of PGm. \*ū now lies quite far east, especially in southern dialects (see Map 15 in van Loon 2014: 215). Limburg and eastern North Brabant belong or used to belong until recently to /u:/-territory, as does northeastern Dutch to the east of the IJssel river. However, there are clear indications that /u:/ used to be indigenous further to the west. For southeastern Brabant, where spellings indicating /u:/ are found in Middle Dutch, this is unsurprising. But the place names *Zoersel* in the province of Antwerp, between Antwerp and Turnhout (1247 *Sursele*, 1336 *Zoersle*), and *Zoerle-Parwijs*, between Aarschot and Herentals (1286 *Zuerle*, 1560 *Soerla*), may well contain Old Dutch \*sūr-, either from WGm. \*sūra- ‘sour’ or from \*sūbra- ‘southern’. Van Loon (2014: 214) suggests that the back vowel was retained longer in particular before *r*, judging also from Brabantish *goetgheboers* (surname, Leuven, 1278) lit. ‘good neighbour’ and *ouenboer* ‘oven hut’ (Leuven, 1372–73), which contain \*būra- ‘dwelling’.

An important exception to the general fronting of /u:/ to /y:/ was the position before *w* and in absolute auslaut, where we find /ou/ in Brabant and Holland and /y/ in Flemish:<sup>151</sup> *nou*, *nu* ‘now’, *jou*, MDu. *jou*, *ju* ‘you’, MDu. *dou*, *du* ‘thou’, *douwen*, *duwen* ‘to push’, *bouwen*, *buwen* ‘to build’ (< \*bū(w)an-). Since Limburgian dialects retain /u:/ in ‘now’, ‘thou’ and ‘build’, it seems certain that the Brabantish reflex *ou* reflects a direct diphthongization of \*ū, and did not go through a stage /y:/. See Pauwels 1940 (and the interpretation in Goossens 1996b: 4) for the traces in Brabant of MDu. /du:/ ‘you’, which in the early twentieth century were found

<sup>151</sup> Heeroma (1946: 124, fn. 4) reckons with the possibility that West Flemish and Zealandish /y:/ before *w* – where Brabant does not have /y:/ – is the result of hypercorrect Brabantization (or/and East Flemish influence) of these sequences into coastal Dutch.

to the west of 's-Hertogenbosch, Tilburg and Turnhout. There is no counterpart in northern French for the positional variant of /u:/ before auslaut or *w*. The first written indication of this diphthongization to *ou* in Dutch is found in the verb 'live' in the Egmond Willeram (ca. 1100): 2SG. *bouwest*, 2PL. *bowet*, PTC.PRES. *bowunde*. In the thirteenth century, the object form of 'you' is found with <*ou*> sometimes in Flanders and Holland: Dordrecht *iou* (1284), Bruges *jou* (1272), *ou* (1280); cf. Van Loon 2014: 217. This contradicts the conclusion of Heeroma (1946: 123), viz. that Holland, and perhaps even Utrecht, may have been /y:/-areas before they became *ou(w)*-areas. Heeroma based himself on Hollandish *sluw* 'sly' (\**slūxa-*, MoWF *slūch*), to which one may add the evidence of *ruw* 'rough' (< \**rūxa-*, MoWF *rūch*). But these words inherited \**x* which may still have been a consonant in Late Old Dutch when the preconsonantal fronting of /u:/ to /y:/ presumably took place.

In order to correctly judge the available evidence, note that the diphthongs \**ew* and \**iw* also yielded StDu. *uw*, *ouw* in a number of cases, and that some western dialects developed *oe(w)* from such combinations. Possibly, the reflex of \**ō* before *w* must be included as well (via \**uow* and simplification to \**uw?*). Examples are Dutch *vlouw* (*flouw*), Kil. *vlouwe*, also *vluw* 'drift net', Zealandish *vloe* (< \**fleuwa(n)-*); Dutch *kloouwen*, *kluwen* 'clew' beside *kloen* in Holland and adjacent areas (< \**kliwina-*), cf. Schönfeld & van Loey (1970: 63). See Heeroma (1946: 124–9) for an extensive discussion of the evidence. I disagree with his interpretation of the historical background (p. 123–4), when he states that word-final /-u:/ > /-y:/ was a specific instance of the general fronting of \**ū*. This fronting "is van Frankische (Vlaams-Brabantse) oorsprong en heeft het oorspronkelijk Ingwaeoonse Hollands pas later veroverd. Als bij iedere expansie zijn er ook hierbij achterblijvers geweest."<sup>152</sup> It seems to me that the merger of \**iw* with \**ū(w)* as /u(:)/ points to a different scenario. In all likelihood, word-final \**ū*, just like word-internal \*-*ūw-* (as in *bouwen*), initially escaped the fronting to /y:/ in all of southern Dutch. Later, it did become /y/ in Flanders and most of Zealand, but was diphthongized to /ow/ in Brabant, and remained /u/ in Zealand, and, possibly, Holland too.

Note that the occasional *oe*-relics in Zealand mentioned in the literature are restricted to exactly these positions, viz. in auslaut and before *w*. In the latter position, \**ūw* has merged with \**iw*, which shows that this is a secondary development, like the one sketched in the preceding paragraph. Examples of this merger are found on West-Voorne (van Weel 1904: 36–7 mentions *joew* 'your', *schoewe* 'shy', *noe* 'now') and Overflakkee (Landheer 1951: 30 has *roe* 'rough', *schoe* 'shy'). At most, we may regard 'rough' and 'now' as relic forms, which were able to preserve /u/ in absolute auslaut, but note that the vowel is short here, as opposed to long /u:/

<sup>152</sup>. "it is of Frankish (Flemish-Brabantish) origin and conquered the originally Ingvaeanic Hollandish only later. As with each expansion, there were stragglers here too".

from \**iw*. The *oe*-timbre may therefore have been preserved because of the short quantity, in which case the words would not count as evidence for the absence of a shift from /u:/ to /y:/ in coastal Dutch. The MAND database shows /nu/ for ‘now’ in nearly all localities from Goeree-Overflakkee to Walcheren and Tholen, and also here and there in Zeeuws Flanders. None of the larger dialect enquiries, nor for instance Kloeke 1927: 54–55, mention *back* vocalism for \**ū* in general in Zealand. Van Ginneken (1928 I: 238) claims that one can occasionally find *hoes*, *kroes*, *loes* in Zealand for StDu. *huis*, *kruis*, *luis* ‘house, cross, louse’, but gives no references.

## 16.2 *Oe*-relics in coastal Dutch toponyms

A number of Standard Dutch words show /u/ for WGm. \**ū*, e.g. *kroes* ‘crisp’, *snoet* ‘snout’, *snoeven* ‘to sniff’. As a by-product of his well-known investigation of the sequence *oe* > *uu* > *ui* in Dutch published in 1927, Kloeke (1926b) proposed that the lexical *oe*-relics such as *kroes* and *snoet* showed that Holland and Zealand were originally *oe*-areas, viz. before *uu* /y:/ started to spread from Brabant and East Flanders. It was soon objected by other scholars, such as de Vries and van Haeringen, that much of Kloeke’s evidence was unreliable. Subsequently, in a small monograph, Schönfeld (1932) invoked the evidence of place names to salvage Kloeke’s idea of a relic area with /u/ in Holland and Zealand. De Vries (1932) wrote an extensive review of Schönfeld’s argumentation, all but annihilating the case for western *oe*-relics in toponymy. However, Schönfeld’s conclusions were canonized in his handbook of Dutch historical grammar (Schönfeld & van Loey 1970: 85), and have consequently become more widely accepted. It is therefore necessary to review his data once more, with the focus on North Holland. As Schönfeld (1932: 28) realized himself, most of the toponymic evidence comes from North Holland, where Frisian was widely spoken until the thirteenth century. It comes as no surprise that most of the *oe*-relics are found in that area, and they may be regarded as straightforward Frisianisms rather than as Hollandish *oe*-relics. De Vries therefore excludes them from his review, but this restriction may actually have undermined the acceptance of his general conclusions.

1. *Armoederhoek* was a district on the island of Schouwen, mentioned in a description of Zealand from 1753. Schönfeld 1932 interprets it as \**Arnemoederhoek*, which would show the earlier *oe*-vocalism of the second element in *Arnemuiden*. This explanation has been objected to by Rentenaar (2006: 193) because the existence of the river Arne itself cannot predate the year 1014 for geophysical reasons. In Rentenaar’s view, this renders it unlikely that it could still be used in combination with a form \*/mu:da/ ‘mouth’. Even if this argument does not

seem compelling (the simplex *moede* could have been retained, and combined with the new river *Arne* after 1014), it still seems more likely that the toponym *Armoederhoek* contains the noun *armoede* ‘poverty’, since ‘poor’ is a frequent element in field names.

2. The element *Buik-* occurs in a few toponyms between Amsterdam and Zaandam: ‘Buiksloot’ (1544 *Bukesloot*, 1632 *Buycksloot*, 1750 “vanouds wel *Boekesloot* genaamd” [“of old called *Boekesloot*”]), ‘Buikhorn’ (1600 *Boeckhorn*, 1635 *Buyckhorn*; Boekenoogen 2004), ‘Buikeland’ (1639 *Buicke lant*), ‘Buksland’ (1584 *bucklant*, 1599 *bucxlant*, *bocxlant*, 1754 *Boxland*), ‘Boekakker’ (1635 *Boeckacker*). Note the introduction of genitival -s in Buksland between 1584 and 1599. Schönfeld (1932: 10) assumes that <oe> was the older spelling and that *Boek-*, *Buke-* render a personal name \**Būko*, with contraction from earlier \**Budiko*; a variant \**Bodiko* can be seen in *Bodenkenlo* (889 copy 1206–26 copies 14th-15th c.) ‘Boekel’ near Heiloo in North Holland. To my mind, even if Schönfeld’s etymology were correct, it would still leave the variation between <u(y)> and <oe> unexplained, since ODu. \**Budiko* would normally yield Early MDu. \**Bodeke* whence with *d*-syncope Middle Dutch \**Bōke* or \**Bōke*. Hence, it seems safer to base our explanation solely on the name \**Bodiko* > *Boecke-*. This would mean that the forms *Buke-*, *Buik-* are due to folk etymology.
3. *Duivendrecht* (near Amsterdam; 1308 *Doevendrecht*, 1346 *Douendrecht*, 1386 *Doevendrecht*, 1426 *Dovendrecht*; but from 1580 onwards *Duvendrecht*, *Duyvendrecht*) is linked to a personal name *Doeve* by van Berkel & Samplonius 2006: 112 (compare the name *Reyner Doeven soen*, Haarlem 1370). Indeed, the spellings <oe> and <o> would be unexpected for an etymon containing \*ū in Holland in the fourteenth century. This explanation leaves unanswered the question of how the name changed to *Duvendrecht* by the late sixteenth century. A possible solution is the fact that like *Doeve*, *Duive* also occurs as a personal name, e.g. from CRM14: *duuen isebuts huis* (1315, Delft), *will duyue* (1348, Leiden), *syman duue soen* (1380, Leiden). This renders it conceivable that *Doevendrecht* was replaced by *Duvendrecht* on folk-etymological grounds, either because *Duyve* had become a more common name than *Doeve* or – and this may be more likely – because the toponym was not associated with any person anymore but with the bird *duif* ‘pigeon’ (cf. van Osta 1996). Schönfeld’s solution (1932: 11) that MDu. <oe> was used to render [u:] and that *Douendrecht* is a scribal mistake for <oe> is very weak. In the end, Schönfeld himself assumes analogical influence from *duif* ‘dove’.
4. *Loet* refers to ‘low-lying, bad (i.e. wet) land’ in North Holland (Boekenoogen 2004: 305), and was also found in medieval Flanders (e.g. *loete*, 1294–1300, near Maldegem in East Flanders). As shown by Schönfeld (1932: 14), it also occurs in a petrified form in toponyms elsewhere, e.g. *Loetcamp* near Gameren

- (Betuwe) and *De Loete* (South Holland). Focusing on the meanings ‘rake, hoe’ of the Middle Dutch appellative *loete* < WGm. \**lōt(j)ō-*, Schönfeld rejects an etymology of toponymical *Loet(e)* as \**lōt-*, arguing that, instead, we must derive it from \**lūtō-* ‘low place’ to PGm. \**lūtan-* ‘to stoop’ (Kroonen 2013: 345; cf. OE *lūtan* ‘to bend, fall’, OHG *lūzēn* ‘to be hidden’, MHG *lūze* ‘hiding-place’). Yet Schönfeld’s rejection of an etymology as \**lōt-* is unwarranted. Middle Dutch *loete* is a ‘tool consisting of a handle and a broad, iron front part, used for scraping or scratching’, and a West Frankish form \**lōtja* ‘spoon’ is reconstructed by ONW as the input for Old French *louce* ‘ladle’ and *loche* ‘spade’. A spoon is characterized by a broad, hollow blade at the end of the handle, and typically gathers liquid in the blade. I therefore propose to regard *loet(e)* ‘low-lying, bad land’ as a metaphorical extension of *loete* ‘spoon, spade’, viz. as a place which, being lower than its surroundings, was always relatively wet.<sup>153</sup> In a similar way, the word *pan* ‘pan’ is used metaphorically in MoDu. *duinpan* ‘dune valley’.
5. *Moes-* beside *Muis-* ‘mouse’ < \**mūs-*. The number of western Dutch *Moes-* toponyms mentioned by Schönfeld (1932: 9) is really small. West Flemish *Moesbrouck* (1592, Veurne-Ambacht), which Schönfeld compares with a different place *Muysbrouck* (1729, Tielt-Buiten), may contain a different word, such as MDu. *mos(i)e, moes(i)e* ‘midge’ or *moes* ‘food’, or it may have a different history. South Hollandish *Mosyenbroec* (1412) can also be interpreted as ‘Midgebrook’, see de Vries 1932: 26. The names *Moesbergen* on the originally frisophone island of Texel and near Doorn (southeast of Utrecht) may have had /u:/ in the Middle Ages. The history of *Moesbosch* on Walcheren, attested since the late sixteenth century, is unknown.
  6. North Hollandish *oeterdijc* (Krommenie, 1355), *Oeterdijck* (Enkhuizen, 1380), *Ooterdijc* (Westzaan, 1412), beside *Uyterdyck* (1402, etc.), *euterdijck* (17th c.) and *eeterdijck* (15th c.), for ‘outer dike’, see Boekenoogen 2004: 120, Schönfeld 1932: 5. An even earlier attestation is *oeterdijc* in a 1298 document from the province of Utrecht referring to Breukelen (VMNW). It is not easy to make sense of this variation if we start from WGm. \**ūtara-* ‘outer’. The spelling <oe> beside <oo> probably represents /o:/ or /o.ə/, while *euterdijck* could reflect either unconditional fronting of /o:/ or *i*-mutation, with *ee-* as its unrounded counterpart. Van Berkel & Samplonius 2006: 345 s.v. *Oterleek* in North Holland derive *oter-* from Frisian *oter* ‘outward’, with a short first vowel, and indeed \**utar-* would yield MDu. /o:ter/ with a long vowel. The same preform \**utar-* was already proposed

<sup>153</sup> I skip Schönfeld’s discussion of the elements *Hoen-* (where no western Dutch evidence for <oe> from \**ū* is adduced) and *Koer-* (where only the farm *Koerland* near Velsen is adduced, of which no old forms are known). The forms in *Groe(n)s-* will contain *groen* ‘green’. *Rumst* and *Rumpt* in the Betuwe have \**rūm-* ‘spacious’ plus *i*-mutation factor (de Vries 1932: 27).

by de Vries (1932: 25) in his review of Schönfeld 1932. The existence of an Old Dutch preform with short \**u*- is confirmed by dialectal *etirsten* ‘outmost’ in Bree (Belgian Limburg), cf. Dupont 1914–1920: 183. This form shows *i*-mutation from the superlative suffix. Whereas the PGm. *ra*-adjective seems to have been \**ūtara-* (OS *-ūtar*, OHG *ūzar*, OFri. *ūter*, OE *ūtor*, ON *útar*), the variant \**utara-* may have been formed on the model of \**uz-* ‘out’. Alternatively, we could posit a shortening of \**ūtr-* to \**utr-* in Old Dutch oblique case forms. At any rate, *oeterdijc* represents no evidence for the unchanged retention of original \**ū*.

7. *Roet* in North Holland refers to a ‘strip of reed along a piece of land’ (Boekenoogen 2004: 430), also in some local toponyms. Northeastern Dutch dialects generally have *ruit*, *roet* for ‘weeds’, and EWN posits \**xrūda-*, cf. MDu. *ru(y)de*, Zealandish dial. *ruë*, *reu* ‘dodder’, etc. Modern Westerlauwers Frisian has *rút* for ‘weeds growing by the waterside’. Possibly, then, North Hollandish *roet* is a direct borrowing from Old Frisian \**rüt* in North Holland.
8. *Souburg* [‘subärx’] (Walcheren, Zealand; 1162 copy 17th c. *Sutburch*, 1198 copy 16th c. *Sutburg*, 1247 copy 1307 *Westsubborgh*, 1335 *Wester Zubburgh*, 18th c. *Zouburg*) contains *zuid-* ‘South’ < \**sūb-*, with early shortening of the stressed vowel in the compound. The personal name *van subburgh*, *van subborgh*, occurring in Holland in the thirteenth century (see VMNW s.v. *subborgh*), confirms the shortness of the first vowel. A variant with <*o*>, *Sobborgh*, is also attested from the late thirteenth century on. The pronunciation [su-] must be due to a later development under the influence of the following *b*, as outlined by de Vries 1932: 22, or it could be due to restoration on the basis of the written language. In any case, *Souburg* is unreliable evidence for the normal development of \**ū* in Zealand.

### 16.3 Oe-relics in the Standard Dutch vocabulary

There is a sizeable number of Standard Dutch words that are claimed to reflect WGm. \**ū* as Dutch *oe* /u(:)/. In most cases, these words coexist or coexisted with words in *ui* or *uu* containing the expected western Dutch fronted reflex of the same etymon. Well known instances of this phenomenon are *snoeven* ‘to boast’ beside *snuiven* ‘to sniff’ and *boer* ‘farmer’ beside *buur* ‘neighbour’. Some pairs of words show a more restricted, metaphorical meaning for the *oe*-form, e.g. in *snoeven* ‘to boast’, *snoet* ‘face’, versus more general semantics for the *ui-* or *uu*-form, in *snuiven* ‘to sniff’, *snuit* ‘snout, beak’. This difference would fit with general tendencies of word replacement: words with more restricted, geographically less wide-spread semantics can be relic forms from an older stage or borrowings from the local substrate (van Bree 2012).

As explained in the previous section, the collection of forms for which this *oe*-relic status is claimed goes back to a proposal made by Kloeké (1926b). Although other scholars were quick to point out that the evidence hardly ever ensures that the *oe*-forms are indeed original to Holland, Schönfeld & van Loey (1970: 85–6) and, most recently, van Loon (2014: 216), retain the basic idea, viz. that some of the unexpected *oe*-words in Standard Dutch represent relic forms of coastal Dutch dialects, especially from North Holland. Other *oe*-words must have been taken over from eastern Dutch dialects which regularly preserved /u:/ . It is usually said to be impossible to tell the difference between a western and an eastern origin of an *oe*-form. This uncertainty alone would, strictly speaking, invalidate the whole collection as proof for the existence of western *oe*-relics.

A renewed investigation of the evidence adduced in the handbooks leaves circa fifteen relatively convincing cases for the co-occurrence of *oe*- and *ui*- or *uu*-forms for the same \*ū-etymon in western and/or contemporary Standard Dutch. In at least part of these cases, a western or eastern origin of *oe* seems probable. To what extent these *oe*-forms prove that coastal Dutch did not front ODu. \*ū remains to be seen. If the *oe*-forms came from North Holland, they may in theory reflect local borrowings from Old Frisian, which means they would not represent relic forms within Hollandish.

1. *boer* ‘farmer’ next to *buur* ‘neighbour’. The cohabitation of these two words in standard Dutch (and, for a few centuries, in many dialects) has a disputed origin. The most straightforward etymology for both of them is WGM. \**būra-* ‘dwelling’, as continued in OHG *būr*, *pūr* n. ‘house’, MLG *būr* n. ‘workshop, cage’, OE *būr* ‘house’. A collective noun \**ga-būra-* yielded OHG *gibūr* ‘member of the household, neighbour, fellow citizen, farmer’ and *gibūro* ‘id.’, see EWAhd IV: 222. The *a*-stem has cognates in OS *gibūr*, OE *gebūr* and MDu. *gebuur*. Deprived of the prefix *ge-*, the latter noun yields MoDu. *buur* ‘neighbour’.<sup>154</sup>

Heeroma (1943b) argues that the form with /u:/ is indigenous in Flanders, Brabant, and Holland. This statement is true for the twentieth century, since *boer* has /u:/ in nearly all Dutch dialects (GTRP), including the areas which usually have fronting. For instance, one would expect ODu. \**būr* to yield *beur* in West Flanders and *buur* in East Flanders, but in reality we find *boer*. Heeroma

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<sup>154</sup> Another interesting word is Dutch *buurman* ‘neighbour’. An early instance is the GEN. PL. *burmanne* ‘inhabitants’ (Haastrecht, 1289). With unequivocal /y:/ -spelling, we find *buurman* (Holland, 1514), *bberman* (North Holland, 16th c.) ‘inhabitant’, feeding into the Modern Dutch word. With a back vowel, *boerman* ‘farmer’ is attested in *Antwerps Liedboek* (1544), in van Vaernewijck’s description of the uprising in Ghent (1566–68), and in a number of farces from the sixteenth and seventeenth centuries. In general, *boerman* seems to be used as a stylistic variant of *boer* ‘farmer’.

implicitly claims that *boer* escaped the fronting to /y:/ because of its etymology \**būwarij* ‘who works [the land]’ > \**būere* > *būr*. The formation would match OHG *bū(w)āri* ‘farmer’ (to *būan*), MHG *būwære*, *buwer* ‘inhabitant; farmer’. Dutch *buur* would then show the straightforward reflex of \**būra-*, whereas *boer* would go back to \**būwere*, which escaped the change of \**ūw* to *ou* found in the base verb *bouwen* ‘to build’. Note, however, that the noun *bouwer* is already attested in East Flemish of the thirteenth century, in the name *Hannekin willem sbouuers sone* (Oudenaerde, 1291). Hence, Heeroma’s explanation does not work for this area.

*Boer* is not attested in Dutch texts as ‘farmer’ before the early sixteenth century. The usual word for ‘farmer’ in Middle Dutch was *dorper*, *dorpman*, *huusman* or *landman*. In fact, the designation of a ‘farmer’ as a separate profession makes less sense when farming is the default occupation. It was urbanisation which created an opposition between city-dwellers and farmers, leading to the introduction of the word *boer* which was borrowed from the people that identified themselves as such. As stressed by Franck & van Wijk (1912) and van Haeringen (1936), the different lexemes used in Middle Dutch for ‘farmer’ strengthen the idea that *boer* is a loanword from more eastern dialects. Nonetheless, we may credit Heeroma (1943b: 51) for stressing that *boer* is already found in various derivatives and compounds in the dictionary *Dasypodius* by Antonius Schorus from 1542, which has the entries *boer* ‘farmer’, *boerachtich* ‘like a farmer, coarse, ill-mannered, unwise’, *boerenhof* ‘farmstead’. Heeroma argues that a word with such an impressive countenance must be indigenous, “onwrikbaar als de boerenstand zelf!” [“as unshakable as the peasantry itself!”].

A slightly earlier, western attestation is *Hobbe Scoutens die turfboere* ‘H. B., the peat merchant’ in a city account from Gouda from 1437. The spelling <oe> before *r* in this document<sup>155</sup> can represent /o:/ or /u:/. The ending -*e* is interesting: although syntactically a dative, all nouns in the same structure in the same text have the nominative-accusative form, such as *bakker*, *mandemaker*, etc. This use of *boer* for ‘farmer who comes to town to sell his products’ has been retained in the modern language, e.g. *visboer* ‘fishmonger’, *melkboer* ‘milkman’, *groenteboer* ‘greengrocer’. The form *turfboere* is potentially very important, as it might help to salvage Heeroma’s explanation of western *boer*. Let us assume that \**būwere* existed in Dutch (as it did in High German), and that it yielded ODu. \**bouwere* (as attested in 1291 *s-bouuers*) before /u:/ was fronted to /y:/. Whereas nouns of this rhythmic structure usually apocopated final schwa in

<sup>155</sup> [http://www.dbl.org/tekst/\\_bij005190401\\_01/\\_bij005190401\\_01\\_0007.php](http://www.dbl.org/tekst/_bij005190401_01/_bij005190401_01_0007.php).

Holland (see Marynissen 1995: 184–94 for the nouns in *-ere*), it is conceivable that *\*bouwere* instead syncopated the internal schwa, giving *\*bou(w)re*. Since /ow/ did not otherwise occur before *r* at this time, the sequence /owr/ may have been reanalysed as /u:r/ automatically, or maybe *\*o* was phonetically raised before *\*w*, much like the sequence *\*iw* gave short /u/ in Zealand and Holland (see § 16.1 above). This solution would explain why *turffboere* in Gouda retains its *e* whereas other agent nouns in *-er* in the same text have lost it. Semantically, it would also be preferable to explain *boer* ‘merchant’ as a direct derivative of *bouwen* ‘to build, cultivate’, rather than from *\*būr* ‘neighbour, farmer’, though the latter of course cannot be completely excluded.

I have no ultimate answer to the question whether *boer* was borrowed from eastern dialects, or whether the standard language might have borrowed it from North Hollandish dialects. In North Holland, *boer* could have been an Old Frisian borrowing, compare OFri. *būr* ‘1. neighbour, 2. citizen with property, 3. (PL.) community’ (Hofmann & Popkema 2008), MoWF *boer* /bu.ər/. It is striking that the surname *de Boer* is most frequent in (western) Fryslân and North Holland, especially along the Zuiderzee coast, but of course this may reflect a development of the last few centuries only.

2. *doffer* ‘cock-pigeon’ beside *duif* ‘pigeon’, from MDu. *duver* (WGM. *\*dūbaran-*M., compare *\*dūbōn-*F.). Kiliaan (1599) calls *doeffer* /dufər/ a Hollandish word. In modern dialects, the male pigeon retains a long vowel in West Flanders (*duuver*) and some southeastern dialects (*doever*), whereas *doffer* with a short vowel is found in dialects of Zealand, Holland, central-northern Dutch and the northeastern dialects (see TNZN Map 1.6). Its *ff* reflects devoicing of *v* before *r* (*\*dūvr-* > *\*dūfr-*) while *o* reflects short *\*u* which resulted from shortening before *fr* (*\*dūfr-* > *\*dufr-*) before *ū* was fronted to /y:/.
3. *kroes* ‘crisp, frizzy’ beside *kruis(bes)* ‘gooseberry’, *kruize(munt)* ‘water-mint’ from WGM. *\*krūsa-* ‘entangled’ (MoHG *kraus*). The word *\*krūsa-* seems to be an ablaut variant of *\*krausja-* ‘intestines’ whence MDu. *kroos* ‘bowels’, for which Kiliaan gives the variants *kroos*, *kroes*, *kroost*, *kroest* in “German, Saxon, Sicambrian, Hollandish”. There is also *kroos* ‘duck-weed’, for which Kiliaan similarly gives as variants *kroos(t)* and *kroes(t)* in Hollandish and Guelrish. Hence, it cannot be excluded that *kroes* ‘crisp’ is the reflex of *\*kraus-*, from any dialect in which *\*au* > MDu. *oo* was raised to *oe*.
4. *loeren* ‘to lour’ < *\*lūran-* beside (unrelated?) *gluren* ‘to glower’ < *\*glūr-*. The verb *loeren* is mainly found in eastern Dutch dialects, and in western Dutch it is not attested before 1578 according to EWN. Its absence from literary medieval Flemish and Hollandish is somewhat surprising for such a basic word. There is a 1514 attestation of the agent noun *luerer* from Holland which shows the expected western /y:/ -vocalism. Also, *loeren* ‘lour’ does not occur in Boekenoogen

2004. It seems safest, therefore, to assume that *loeren* was introduced into western Dutch from eastern dialects.

5. *poes*, Early MoDu. *puids* ‘she-cat’ < \**pūs*- . The *ui*-vocalism is original to Holland, including North Holland (cf. Boekenoogen 2004 s.v. *puisje*). An older word is *poesele* (Kiliaan) ‘fat girl’, MoDu. *poezelig* ‘chubby’. It may be derived from \**pūs*- ‘to swell, inflate’, cf. *poesten* ‘to blow’, *puist* ‘pimple’ (MoHG *bausen*, *bauschen* ‘to swell’). The Early MoDu. verb *poesen* ‘to kiss’, in northern dialects *poezen* ‘to spill water’, may also be related. Its *oe* may be onomatopoeic.
6. *proesten*, MDu. and Early MoDu. *pruysten* ‘to sneeze; explode with laughter’ (MLG *prüsten* ‘sneeze’). *Proesten* is called Hollandish by Kiliaan; in literary texts, it does not occur with *oe* before 1746, and it is then found several times together with *hoesten* ‘to cough’. This suggests that *proesten* may – in lower sociolinguistic registers? – owe its *oe* to the rhyme with *hoesten*, and/or to the continued onomatopoeic association with ‘sneezing’ (WNT).
7. *sмоel* ‘mug, face’ beside Early MoDu. *smuyl*, MDu. *coesmule* ‘cow’s head’ (1343). One of the earliest attestations with <*oe*> is *sмоel* spoken by the maid *Angeniet* in Bredero’s *Moortje* (1615): *Houwt den smoel toe* ‘Keep your mouth shut!’. Verbal derivatives include *moddermulen* ‘to give sticky kisses’ (1524), *smodder-muylen* ‘id.’ (16th c.), MoDu. *meesmulen* ‘to smile ironically’ < *mees-muilen*. *Smuil* is a variant of *muil* ‘mouth (of an animal)’, G. *Maul*, with *s-* probably taken from \**smīlan*, cf. OHG *smīlan*, English *smile*. In fact, the verb *smuyle* is glossed as ‘to smile’ in Kiliaan (1599); it disappeared from the language soon afterwards. It seems certain that *smuil* contains the original Hollandish vocalism. As there is no indication that *sмоel* came from North Holland; most likely it was introduced from eastern dialects and/or Low German.
8. *snoet* ‘snout’ (usually of a person) beside *snuit* ‘snout, muzzle’ < WGm. \**snūtō-*. The variant *snuit* is the more neutral denomination in the standard language, whereas *snoet* is often used as a term of endearment. *Snoet* is first attested in 1665 in *snoetdoecken* ‘tissues for wiping the mouth’ (in a Brabantish text, WNT s.v. *voorschoot*), and very sporadically in literary texts of the eighteenth century (1722 in the farce *Medea* by Rousseau, printed in Amsterdam; in 1779 in Berkhey). The dialects of Flanders and Zealand have *snuut(e)*, as expected from \**snūtō-* (WZD, WVD). The form *snoet* must come from eastern dialects.
9. *snoeven* ‘to breathe audibly; boast’ beside *snuiven* ‘to sniff’ < \**snūban-*. The earliest instance of *snoeven* <*snuoven*> is found in a Flemish text from 1548, and there are other attestations showing that the *oe*-form was not originally confined to North Holland. Kiliaan has *snoeven*, *snuyven*, *snoffen* ‘to breathe (audibly)’, with dialectal variants of possibly the same preform \**snūven*, and the expression *sonder snoeven wt drincken* ‘to drink up without taking a breath’. In view of the onomatopoeic meaning, it is quite possible that *oe* was preserved

or restored in this verb more often because of the association with the sound of breathing heavily.

10. *soezen* ‘to doze’ beside *suizen* ‘to buzz, sigh’. For Kiliaan, *soesen* and *suisen* both mean ‘to rustle, hum’. The meaning ‘buzz, rustle’ is still attested for *soezen* in the seventeenth century, but the verb has since specialized to ‘doze’. Probably, *soezen* was kept for onomatopoeic reasons.
11. *stoer* ‘sturdy, stalwart’ beside *stuurs* ‘surly’ < WGm. \**stūra-*. *Stoer* is first attested in literary texts from North Holland in the eighteenth century. It replaces Middle and Early Modern Dutch *stuur* ‘strong; surly’. In the meaning ‘surly’, *stuur* is replaced by its derivative *stuurs(ch)*, though *stuur* survives in many southern dialects. In dialects, *stoer* is also known in all of northeastern Dutch. Thus, it is impossible to determine whether *stoer* entered the literary language via North Holland or from eastern dialects.
12. *stoet* ‘loaf of bread’ (thus in North Holland and in northeastern dialects, cf. Jobse-van Putten 1980), versus West Flemish *stuuite*, Waaslandish *stuut*, from \**stūtō-*. *Stoet* cannot be ascribed to the standard language since it is a dialectal word. Still, it would be relevant to know whether it can be explained as a Frisian loanword in North Holland. Frisian has *stút*, with /y/ from Early Modern Westerlauwers Frisian fronting of Old Frisian ū before dentals. The occasional attestation of *stút*, *stoete* (WFT) shows the old vowel. Hence, North Hollandish *stoet* could be a loanword from Old Frisian. The standard language has *stoethaspel* ‘clumsy person’ (first attested in 1782 in North Holland), which may also belong to *stoet* ‘loaf of bread’.
13. *stoetelen* ‘to act clumsily’, a North Hollandish dialect form of unclear origin. It has been explained as a frequentative in -*elen* to *stuiten* ‘to stop, impede’, but the latter verb continues \**stautan*.
14. *stroef* ‘stiff, rough’ (of a surface) beside MDu. *struuf* < WGm. \**strūba-*. The former is not attested before 1750, and initially occurs mainly in texts by Hollandish authors (WNT). Probably *stroef* was introduced from eastern dialects.
15. *toet* ‘face’, also ‘sow’ in North Holland, beside *tuit* ‘spout, nozzle’ < \**tūtō-*. The oldest attestation of *toet* is from a 1655 farce from Amsterdam.
16. For *toeten* (first attested in 1600), *toeteren* beside MDu. *tuten*, MoDu. *tuiten* ‘to resound, play a wind-instrument’, one may invoke onomatopoeic preservation of the sound [u:]. Still, *toeten* may well have entered the standard language because it was preserved in North Holland.

## 16.4 Conclusion

In § 16.1, it was established that there is no coastal Dutch dialect with traces of a general retention of \*ū as /u(:)/. We can see that word-final \*-ū has merged with \*iw to give short /u/, and that this is preserved as such in Zealandish. We have seen in § 16.2 that there is no reliable evidence for coastal Dutch oe-relics in toponyms. At most, the North Hollandish word *roet* may have been borrowed locally from Old Frisian. The appellatives which were thought to be western oe-relics fall into the following categories:

- onomatopoeia: 5. *poes*, 6. *proesten*, 9. *snoeven*, 10. *soezen*, 16. *toeten*
- not a (direct) reflex of long \*ū: 2. *doffer*, 3. *kroes*, 13. *stoetelen*
- not found in (North) Hollandish and therefore probably taken from eastern dialects: 4. *loeren*, 7. *smoel*, 8. *snoet*, 14. *stroef*
- possibly a North Hollandish word, but uncertain whether it entered the standard language from North Holland: 1. *boer*, 11. *stoer*, 15. *toet*
- North Hollandish dialect word which may have been borrowed from Old Frisian: 12. *stoet*

I conclude that there is no reliable evidence for the retention of \*ū as /u:/ in Zealand or Holland at the time when Flanders and Brabant underwent fronting of this vowel to /y:/: Of course, that does not exclude the possibility that Zealand and Holland lagged behind in this change – but if they did, they must have caught up before 1200 when written sources set in, and when <u> and <ue> are used as spellings for /y:/.



## WGm. \*ea, \*eo and \*ō

The mid diphthongs \*ea (traditionally reconstructed as \*ē₂) and \*eo and the mid monophthong \*ō of West Germanic eventually yielded high vowels such as /i:/, /iə/, and /u:/, /uə/ in Flemish, Zealandish and Hollandish. Yet there are traces of the mid vowel stages in old and modern texts. The investigation will concentrate on the coastal provinces, Brabant, Utrecht, and southern Guelders. Monophthongal /e:/ is found in all periods in East Limburg and in the northeastern dialects, where it forms an integral part of the Low German /e:/ -area (Pijnenburg 2005: 113–4).

### 17.1 Coastal Dutch ee for StDu. ie

The Old Dutch reflex of \*eo has been discussed by Gysseling (1992: 46–79) and Tavernier-Vereecken (1968: 574). Whereas the general evolution in Ghent is from <eo> via <io> to <ie> by the tenth century, and then mainly to <i>-spellings by the twelfth century, there is minority of tokens with <e> in the eleventh and twelfth centuries. Tavernier-Vereecken mentions examples such as *Letbert* for \**Liod-berht* and *Gerlef* for \**Gair-leof* (11th c.), *Levilt* beside *Lievild*, *Thetbaldus* for \**p̥iotbald-* (12th c.), and the West Flemish toponym *Ledegem* from \**leod-* (*Liedenghem* 1085 copy middle 12th c.; *Lidengim* 1111 copy 1126–50; *Lidegem* 1187; *Ledenghem* 1205).<sup>156</sup>

In the modern period, \*ea (as in *brief* ‘letter’) and \*eo (as in *vliegen* ‘to fly’) have yielded /iə/ in French and West Flanders but /i(.)/ in the other coastal Dutch dialects. It is generally thought that these vowels reflect an Early Middle Dutch diphthong /iə/ which was monophthongized everywhere except in West Flanders. See *FAND II/III*, maps 89 *brief*, 90 *vliegen*, 94 *vier*, and – with various regional complications – maps 91 *spiegel*, 92 *nieuw*, 93 *knie*.

A mixed bag of Middle Dutch evidence for <e> instead of <ie> is discussed by van Loey (1980: 44). As it turns out when we check the corpus of the thirteenth century, there is very little clear evidence for stressed /e:/ in the coastal dialects. An isolated *ee*-form of *lief* ‘dear’ is the DAT.PL. *leuen* (WHol., 1282). For *drie* ‘three’, a

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<sup>156</sup>. The relevance of her other example for \*eo yielding <e> = /e:/ is uncertain: in East Flemish *Leeuwergem* < \**leodwaringa-haim-* (*Lewergem* ±1177, *Leewerghem* 1285), \*dw may have assimilated at an early stage, yielding \**lewaringahēm*.

few *ee*-variants occur here and there: *dre* and *dreen* in Arkel (SE-Hol.) and Utrecht, and the dative *dren* in Oostwinkel-Zomergem (EFla.). *Te(e)n* ‘ten’ is found once each in Bruges, Brussels and Holland, as against hundreds of tokens of *ti(e)n*. The derivative ‘tithe’ is found as *teinde* and *theinde* in a single West Hollandish charter from 1280–87. *Prester* ‘priest’ occurs once in Antwerp, versus usual *pri(e)ster* in all of Early Middle Dutch. For *lieden* ‘people’, a variant *-lede(n)* occurs especially in compounds such as *onsleden* ‘us’, *hemleden* ‘them’ in Flanders (see Berteloot 1984a: 90 and Map 124). Hence, *-leden* probably represents a specific development in unstressed syllable. The name ‘Peter’ is usually written as *Pieter* in Flanders, Zealand and several other places, but *Pe(e)ter* is quite regular in South Brabant and in North Holland (but in the latter area, only in a handful of forms). Also, *Peter* is more frequent than *Pieter* in the Hollandish count’s charters from The Hague. Unfortunately, influence from Latin *Petrus* can never be excluded, so that the attestations of *Peter* remain inconclusive for our investigation.

Some preterites of strong verbs with \**ea* are spelled with single <e> in Early Middle Dutch (van Loey 1980: 19), mainly in Holland. The evidence concerns *ghenc* ‘went’ (2x, WHol., EHol.) for usual *ghinc*; *held*, *helt* occasionally in Flanders and West Holland for *hi(e)ld* ‘held’ (see Berteloot 1984a: 80 and Map 103); *veel* (1x WFla., 1285) for *viel* ‘fell’, also *vel* (WFla., *Rijmbijbel*, rhyming with *spel* ‘play’), *dat ghevel* ‘it happened’ (5x in WFla.) for *geviel*; and *ontveinch* (WHol., 1280–87), *ontfeing* (WHol., 1299) for usual *ontfinc* ‘received’. From Late Middle Dutch we can add *henck* ‘hung’ in *Der Minnen Loep* by Dirc Potter and *heng* in *Heraut Beyeren* (Hol., 1450–70). Since we are dealing with a short vowel (as shown by the rhyme of *vel*), we may assume that <e> in these strong preterites represents a western shortening of /iə/ or maybe of earlier /e:/ before two consonants. If the latter is true, *ghenc*, *helt* etc. would prove an earlier stage \*/e:/. The Leiden Willeram form *gieng* (p. 107, line 01) suggests that the shortening did not occur before the twelfth century, in which case it is more likely to go back to /iə/ than to /e:/, but we cannot be absolutely sure.

*Spiegel* ‘mirror’ often has <e>. It is a loanword from Gallo-Romance \**spēglu* which may date from between 600 and 800 (Gysseling 1992: 25). We find Early MDu. *spegel* (WFla., 1287, *Der Natueren Bloeme*), DAT.SG. *speghelkine* ‘little mirror’ (Bruges, 1281, 1298), and later *speghel* with Jan Praet (WFla., 1401–50) and in other Flemish texts. The map *spiegel* in *FAND* shows that the modern dialect word behaves differently from the other *ie*-words in French and West Flanders, in that it has /e./ rather than /iə/. In this region, /e./ is the expected reflex of lengthened \**e* in open syllables. Hence, the *FAND* commentary (p. 200) suggests that the West Flemish word could be a more recent borrowing. This is possible, but the precise restriction of this other borrowing to western Flanders, which borders on the francophone area, would remain enigmatic. A different solution may be preferable. It is conceivable that Romance \**spēglu*, when it was borrowed, was adopted with a

short vowel by the (West) Flemish dialects, yielding MoFle. /e./ by open syllable lengthening. The same Romance word may have been incorporated into the inland dialects with a long vowel /e:/. Note a similar vacillation in the vowel quality and quantity of the Latin or Romance borrowings feeding into StDu. *tegel*, *tichel* ‘tile’ (Lat. *tegula*) and *regel*, *richel* ‘rule’ (Lat. *rēgula*), cf. § 9.2.1.

The sound law *ierC > eerC* found in the historical grammars of Dutch is modified by Pijnenburg (2005)<sup>157</sup> in the following way. Rather than being a general Old Dutch development, it originated, according to Pijnenburg’s investigation of the Middle Dutch forms, in Brabant in the thirteenth century. In texts from Brabant, StDu. *deerne* ‘girl’ (\**pewernō-*), *veertien* ‘fourteen’ and *veertig* ‘forty’, as well as MDu. *veerdel* ‘quarter’ (from \**fewwar* ‘four’) – all of which have <ie> in Late Old Dutch – are first attested with a spelling <e(e)r>, viz. in the second half of the thirteenth century: *derne* once in the Liege *Diatessaron* (EBrab., ca. 1300), *veer-* in the numeral ‘40’ in Mechelen (5x), and *ver-* in Geertruidenberg (1x) and the Liege *Diatessaron* (1x). In the fourteenth century, Pijnenburg (2005: 113) finds *veer-* in ‘14’ and ‘40’ in many places in Brabant, from Zoutleeuw (1300), Tongerlo (1311), and Brussels (1312) in the south to Den Bosch (1348) and Oisterwijk (1349) in the north, with a focus in the southeast of North Brabant. Probably, the lowered vowel first spread to Limburg, as in *veirtin* (Brustem, 1338), *vertich* (Maaseik, 1343). From the CRM14 corpus, we can add *veerdel* (Cuijk 1391, Hasselt 1396, Lummen 1397) and *verdel* (Hasselt 1396, Tongeren 1396) ‘quarter’. The reflexes of these words in the northeastern dialects are irrelevant to us, since Westphalian generally has <e> from \*eo. For instance, *vertich* ‘40’ is also found in Overijssel from ca. 1340 onwards.

It remains to be seen which phonetic scenario best explains the given forms. Pijnenburg assumes that ODu. *ie* was shortened before *rC* in Brabant (and Limburg), as is suggested by spellings with <i> such as *virde* ‘fourth’. It would have merged with the similarly shortened reflexes of \**airC* (e.g., *irste* ‘first’) and \**ērC* (e.g., *van wirte* ‘from Weert’) into a short mid-high vowel [i].<sup>158</sup> The latter vowel then took part in the more general lengthening of short vowels before *r* plus consonant of the type *woord* ‘word’, *aarde* ‘earth’, *eerve* ‘heir’, yielding *deerne* and *veertien*. I am not sure that we need the detour of a specifically Brabantish shortening of *ie* before *rC*, if only because we find ‘fourth’ spelled as *virde* also in Cleves/Guelders, Dordrecht, Ghent and West Flanders in the thirteenth century, whereas the town of Mechelen already has *veertich* in the same period. Probably, long and short-vowel forms of these compounds co-occurred in the thirteenth and fourteenth century in many Dutch dialects.

<sup>157</sup>. In essence, already in VMNW s.v. *viertich* ‘40’.

<sup>158</sup>. That such a shortening is plausible, but did not always yield /i/, is suggested by Houten, Utrecht, *vortinnacht* (1295); cf. South Holland *dorde* ‘third’ in Early Middle Dutch.

Altogether, no reliable evidence remains for assuming that coastal Dutch had a systematic mid-vowel reflex of \*ea or \*eo at any time after 1000, or, in any case, not to a greater extent than is found in some etyma in inland Dutch dialects.

## 17.2 Coastal Dutch *oo* for StDu. *oe*

For WGm. \*ō, there are several indications that it originally remained a mid vowel in coastal dialects. At the same time, many of the Middle Dutch spellings cannot be interpreted in an unambiguous way. For this reason and others to be explained below, the phonetic and geographic details of the reflexes of \*ō remain disputed.

Schönenfeld & van Loey (1970: §68) list a number of arguments for the view that a mid vowel value applied to western reflexes of \*ō in Middle and Modern Dutch:

- Middle Dutch <o>-spellings (see also Mooijaart 1992: 138);
- Middle Dutch rhymes of \*ō with \*au (e.g. *doe* ‘then’: *also* ‘thus’);
- North Hollandish <oo>-spellings;
- claims of Erasmus and Hollandish grammarians of the seventeenth century to the effect that *oe* must be read as ō;
- occasional mention of dialectal forms such as *kookje* ‘cake’, *voot* ‘foot’, *vroog* ‘early’, *broor* ‘brother’ in South Holland;
- petrified toponyms such as *Moordrecht* (to *moer* ‘moor');
- Middle Flemish spelling variation.

A further indication for a mid vowel value in Middle Dutch are the mid vowel relics in modern western dialects, which we will discuss below.

Van Loon (2014: 154–57) thinks that the Old Dutch value may have been [o:], based on a number of clues: (1) Before the glide *j*, Middle Dutch retains the spelling <o> rather than <oe> until the sixteenth century: *vloyen* ‘to flow’, *groyen* ‘to grow’, etc.; (2) Most of the Old Dutch names and toponyms have <o>, whereas only a minority has <uo> (see Gysseling 1992: 38–41); (3) The spelling <oe>, which is first attested in 1161 for *Moer* near Antwerp, soon becomes the most popular spelling in closed syllable. The same spelling is used in Early Middle Dutch for the low back vowel /ɔ:/ from \*au. This identical spelling suggests – though it does not prove – that the vowels /o:/ and /ɔ:/ were relatively similar; (4) Dutch retains /ɔ/ in some words and suffixes in which WGm. \*ō was shortened before it was diphthongized and/or raised. Examples are *tot* ‘until’ <*toe + te*, *zocht* ‘sought’ < \*sōxte, the suffix *-dom* ‘-hood’, *Robbrecht* ‘Robert’ < \*Hrōd-berxt-. The occasional Old Dutch *uo*-spellings in Flemish place-names (e.g. *Gruononberg* and *Buosingahem* in French Flanders) are dismissed by van Loon as possibly non-local spellings.

### 17.2.1 The Middle Dutch situation

The investigation into the Early Middle Dutch realization of \*ō is complicated by the large number of graphemes which can represent /o:/, /u:/ or a falling diphthong starting in /o/ or /u/. The most frequent variants are <o>, <ó> (rarely), <oe>, <oo>, <oi>, <ou>, <owe>, <uo>, and there are others which are not found in western texts. The statutes of the Ghent Leprosy from 1236 show an early stage of transition from ODu. <uo> or <o> to MDu. <oe> (Larsen 2001: 228–30). In this document, the vowel \*ō is spelled with <uo> in 9% of the 195 tokens, as in *behuof* ‘need’, *bluod* ‘blood’, *stuol* ‘stool’, *guode*, *guoder* ‘good’. The spelling <o> is found in nearly 70% of the tokens, with a preference for open syllable (90% of all open-syllable spellings have <o> as against 44% of the closed syllables), whereas <oe>, conversely, is found in 20% of all tokens but in 37.5% of all closed syllables. This confirms that <oe> was probably first used in closed syllables. One possible reason for this distribution could be that diphthongization to /oə/ happened earlier or was better preserved in closed syllables. But a more likely explanation is that the scribes wanted to indicate the vowel length in closed syllables (where /o:/ was opposed to short /o/ or /ɔ/). In open syllable, regular lengthening of \*o and \*u meant that every <o> naturally indicated a long vowel.

Mooijaart (1992: 139) observes that <oe> in *broeder* (ODu. \*brōder) is found in nearly 100% of the instances in Flanders and Zealand, but only in 50% of the cases in Holland. She hypothesizes that this might point to a phonetic difference. If so, it would mean that Flanders had a diphthong such as /oə/ whereas Holland had /o:/. But it might alternatively be interpreted as a sign that open syllable lengthening had not yet developed to the same extent as in Flemish.

In the second half of the thirteenth century, the clearest indication for a diphthongal value of <oe> is the variant <owe> in southwestern Brabant, viz. in Brussels, Mechelen and Sint-Pieters-Leeuw in *doe* ‘then’, *hoe* ‘how’ and *toe* ‘to’: *er ... towe, daer towe* ‘thereto’ (Brussels, 1277, 10x; Mechelen 1x), *daer touwe, hijr touwe* ‘hereto’ (Sint-Pieters-Leeuw, 1298), *dowe* ‘then’, *howe* ‘how’, *er towē* (Brussels, 1276). Note that this phenomenon is restricted to word-final \*-ō and may be due to a specific phonetic development in this position. Van Loey (1980: 73) interprets these sequences as /-ouwə/ and gives some additional evidence from the word \*kō ‘cow’ in southeast Brabant: *couwestrate* ‘Cow’s street’ (Tienen, 1451), *couwe* ‘cow’ (Tienen, 1422), *touwe* (Zoutleeuw, 1472). The main distributional patterns and the possible phonological background of the other spellings in the thirteenth century have been discussed by Mooijaart (1992: 134–42).

Leaving aside <o> and <oe>, which cannot be interpreted unambiguously, I move to the spellings <oi> and <oo>, which are more reliable renderings of a monophthong /o:/. In western Dutch, <oi> is almost only found in closed syllables.

Most of the tokens come from West Holland, thus supporting the view that this region had /o:/.<sup>159</sup> The spelling <oo> is even rarer, and is mainly found in West Flanders.<sup>160</sup> Van Haverbeke (1955: 44–7) assumes that Bruges still had /o:/ during most of the thirteenth century, though the vowel may have been raised before labial and velar obstruents by the end of that century.

### 17.2.2 Mid vowel relic forms in western dialects

The modern distribution of reflexes of \*ō in coastal Dutch dialects is given by *FAND II/III*, and has been discussed in some detail by Taeldeman 1992: 439–42. Most of the dialects of East Flanders and Zealand, as well as most of Holland, show /u/ in all surroundings, but long /u./ is found in eastern East Flanders and on the border of West and East Flanders. Not surprisingly, in Zealand and Holland the long vowel is more frequently found before resonants, as in *groen*, *voelen*, *koel*, and *roeren* (see the maps in *FAND*).

Many dialects show a complementary distribution between the reflex of \*ō in front of dental obstruents and resonants, on the one hand, and labial and velar consonants, on the other hand (Taeldeman 1979: 68). Western Flanders opposes a long reflex /u./ before dentals to short /u/ before labials and velars; in a small triangular area in the southeast of West Flanders and the southwest of East Flanders, the opposition is between /u/ and /ou/. Willemyns (1971: 110) assumes that the frequent spelling <ou> in Bruges in the fifteenth and sixteenth centuries before labials and velars (*begrouven* ‘buried’, *zoucken* ‘to search’, etc.) – which contrasts with <oe>, <o> before dentals – decidedly points to [u]. The Middle Dutch data from the town of Oudenaerde show the gradual rise in the thirteenth century and until 1450 of a sharp distinction between <ou> before labials and velars and <oe> in other positions (Hoebeke 1968: 382–401). In the sources from the thirteenth century, <oe> and <o> are found to alternate before dentals, but <oe>, <o> and <ou> all occur before labials and velars: *bloeme*, *bloume* ‘flower’, *brouc-*, *broec*, *broc* ‘wetland’.

<sup>159</sup>. In *alemoissen* ‘alms’ (WHol., 1297), *broic* ‘brook’ (WHol., 1280–87, Rijnsburg, 1294), *broider* ‘brother’ (Dordrecht), *g(h)oit*, *goid* ‘good(s)’ (EFla., 1292; WHol., 1280–87, 1298; WBrab. 1293, 1296, 1298; Utrecht 1296), *groit* ‘greets’ (WHol., 1282), *moider* ‘mother’ (EFla., 1293), *moit-wille* ‘intent’ (NBrab., 1277), *voreghenoimt* ‘aforementioned’ (WBrab., 1298–99), *ondoit* ‘undoes’ (WFla., 1287), *poil* ‘pool’ (WHol., 1280–87), *goinsdach*, *scoindages* ‘Wednesday’ (EFla., 1293), *woistinen* ‘wilderniss’ (EFla., 1212–23).

<sup>160</sup>. In *boof* (23x in Bruges, vs. 800+ times *boef*; 1x in Mechelen) ‘necessity’ (MoDu. *behoef*), *groone* ‘green’ (1x WFla., 1287; in the same line as *grone* and *groeneden* ‘greenness’), *goot* ‘good’ (1x Oudenaerde 1291–1300), *roost* ‘rust’ (WFla., 1287), *voreghenoont* ‘aforementioned’ (Ghentbruges, 1293).

*bouf, boef* ‘behest’, etc. Like Willemyns, Hoebeke regards <ou> as a rendering of a monophthong [u], as against other scholars who have assumed a diphthongal value [ɔu]. One of Hoebeke’s arguments is that, among thousands of tokens with \*ō before labials and velars from the Oudenaerde region before 1600, not a single instance of an unambiguous diphthong <au> has been found (Hoebeke 1968: 399). Whatever the precise phonetic value was, Oudenaerde in any case points to a conditioned split of \*ō already in the thirteenth century.

Further north, a complementary distribution along the same lines can be found in more traditional dialects of Holland, such as those of Goeree, Scheveningen, Katwijk, Noordwijk, Zandvoort, Marken and Huizen. It takes the shape of /u/ before dentals versus /o./ before labials and velars in Marken and Scheveningen (according to Heeroma 1935: 77–78; in *FAND*, /o./ has ceded to /ou/ or merged with /u/), and of /u/ versus /o.u/ in Zandvoort, Noordwijk, and Katwijk (as per Heeroma 1935: 77–8 and *FAND*). For Assendelft, Boekenoogen (1897: xxxi) mentions *vróger* ‘previously’ and *dó* ‘then’ as archaic but contemporary forms with /o./.

The same conditioned split of \*ō can be retrieved for earlier stages in Holland, where the farces by van Santen from 1617 and 1620, which are staged in Delft, spell *oe* before dentals but frequently *oo* in front of labial consonants and *oo* and *ou* before velars (Crena de Iongh 1959: 48–53): *bedrooft* ‘sad’, *hoven* ‘to have to’, *toven* ‘to stay’, *ro(o)pen* ‘to call’, *bloom* ‘flower’; *genooch*, *ghenouch* ‘enough’, *koocken* ‘cakes’, *bouck* ‘book’, *vroug* ‘early’, etc. These spellings are confirmed by documents from the Delft archives. Crena de Iongh regards <oo> as the regular variant before labials and <ou> as original before velars. Traces of /o:/ are found throughout the earlier literature, too. In the charter corpus of CRM14, I found thirteen <oo>-spellings in Holland and Zealand.<sup>161</sup> A relic form which survived into the modern standard language is the adjective *loom* ‘sluggish, languid’ < WGm. \*lōma/i-. It surfaces as MDu. *loeme* ‘hole in the ice’ (Ghent, 1336–49; Kilian, 1599), *loemen* ‘to destroy’ (Brabant, 1390–1410), adv. *ghelome* ‘abundantly’ (Jan Praet, Fla., 1401–50), and after 1600 only *loom* ‘sluggish, languid’.

For our purposes, the main question is whether the conditioned split of \*ō can go back to the Old Dutch period, and whether it arose at the time of the putative shift from Proto-Frisian to Old Franconian. Unfortunately, contemporary sources from Old Dutch do not provide enough information. In modern dialects,

<sup>161</sup> In *behoof* ‘behest’ (Leiden, 1372), *Roopen sone* ‘Roop’s son’ (Middelburg, 1378), *Haghebrooc* (toponym in -*broek* ‘brook’ near Wassenaar, The Hague, 1400), *toot* ‘to’ (Delft, 1356), *costrate* ‘Cow Street’ (Gouda, 1324), PN *Hoon* (Haarlem, 1372; if *hoon* means ‘hen’), *woonsdaghes* ‘Wednesday’ (Gouda, 1353), *voerghenoomde* ‘aforementioned’ (The Hague, 1400), *vorenghenoomit* (Aardenburg, 1396), *vornoemd* (Heinkenszand, 1352), *scoomakers* ‘shoemaker’ (Haarlem, 1390), *eyghendoom* ‘property’ (Alkmaar, 1348), *Jan Doomsdach* ‘Doomsday’ (Middelburg, 1396).

a parallel split development of long back vowels can be observed in Flanders, which points to a probable system-internal cause of the conditioned split. This parallel split concerns the Flemish reflexes of West Germanic long \**ā* and lengthened \**a* in open syllable. Both vowels appear to have merged in Late Old Flemish /a:/, but the modern reflexes depend on the place of articulation of the following consonant (Taeldeman 1979: 61–62). Again, before dentals we find a closed long vowel or a diphthong, whereas labial and velar consonants do not cause the same shift. For instance, we have /zo.ət/ ‘seed’ vs. /a:k/ ‘hook’ in West Flemish, /zu.ət/ vs. /uk/ in southeastern Flanders. For WGm. \**au*, a similar distinction between /o.ə/ before dentals and /o./ before other consonants is found in western Flanders (Willemyns 1971, Taeldeman 1979: 71). Thus, the Flemish reflexes of ODu. \**ā*, \**ɔ̃* (from \**au*) and \**ō* allow for the generalization that long back vowels were more closed before dentals than before labials and velars (Taeldeman 1992: 441; also the next section). By contrast, the latter position was more prone to preserve mid monophthongs or to cause the rising diphthong *ou* (Taeldeman 1992: 440–2).

There is no apparent link with putative language contact of the Merovingian or Carolingian periods. Modern West Frisian shows a similar conditioned split of OFri. \**ō*, which becomes /uə/ in closed syllables before dentals but was monophthongized to /u:/, and sometimes shortened to /u/, before labials and velars (Siebs 1901: 1415, Hoekstra 2001: 726; before *p*, *t*, *k* and *m*, the vowel is mostly shortened to *o*): *goes* [gu.əs] ‘goose’, *hoed* [hu.ət] ‘hat’, *foet* [fu.ət] ‘foot’ but *boek* [bu(:)k] ‘book’, *droech* [dru(:)x] ‘carried’, *groef* [gru:f] ‘dug’, *toevje* [tu:vjə] ‘to stay’. However, this split does not go back to Old Frisian but represents a secondary development on the basis of a general Late Old West Frisian diphthongization of long mid vowels. The late date of the split is borne out, among other things, by the absence of a conditioned split in the dialects of Schiermonnikoog – which have /yə/ in *fyət* ‘foot’, *bryak* ‘trousers’, *hyəp* ‘hoop’ (Spenter 1968: 223–33) – and of the town of Hindeloopen. Versloot (per email, 18 November 2013) therefore dates the conditioned split in Frisian to the sixteenth or early seventeenth century. In his view, it might well be another instance of Westerlauwers Frisian adopting a Hollandish dialect feature, in the same way as was proposed by Versloot (2012, especially p. 112) for the raising of OFri. *ā* to MoWF *ea* and for several other phonological and morphological features.

### 17.2.3 Shortening to *o*

Long \**ō* has a short reflex /ɔ/ in a number of cases, in particular before *m*, voiceless obstruents and consonant clusters.

### Before *m*

Van der Meer (1927: 2) holds that *m > mm* occurs especially after rounded vowels. Schönfeld & van Loey (1970: 29) simply state that vowels were often shortened, at least in some Dutch dialects, before *m*. Van Bree (2016: 369) considers “de relatieve sterke van deze nasaal” [“the relative strength of this nasal”] to be a possible factor, and Schrijver (1999: 31–2) claims that MDu. *m* “counts as a geminate”. Typologically, such a rule has parallels elsewhere. For instance, in northern Italo-Romance (i.e., the dialects of the northern half of Italy plus Swiss Ticino), the general lengthening of Classical Latin short vowels in open syllables has not applied to vowels before *m*, which suggests that *m* counted as *mm* (Loporcaro 2014: 197–9). The short reflex of Classical Latin long vowels before *m* in southern Italo-Romance (e.g., Neapolitan *fummo* ‘smoke’) suggests the same (Rohlfs 1966–69 I: 310–1). In his 1999 paper, Schrijver argues that British Celtic substrate may have induced lengthening of *m* (because *p*, *t*, *k* and *m* counted as geminates in Early British Celtic), but it remains striking that most cited examples from Dutch concern the vowel \*ō.

The sequence \*-ōm- occurs in seven Middle and Modern Dutch stems and their derivatives: MDu. *bloeme* ‘flower’, *doem* ‘doom’ (also in the suffix *dom*), *loeme* ‘hole in the ice’, *loemen* ‘to destroy’ (MoDu. *loom* ‘sluggish’), *noemen* ‘to name’, *roem* ‘fame’, *sloemen* ‘to slumber; to binge’, and *wloemich* ‘turbulent’. The last two stems are rarely attested and yield no evidence for shortening. The stem *loem-/loom-* is rare in Middle Dutch, but in modern dialects *loom* does appear with shortening (according to WNT). *Lom* is found in Zaanstreek (Boekenoogen 2004) and in a few earlier literary attestations, e.g. in Sluyter (1688) from Amsterdam. The noun *loeme* has a variant *lomme* in West Flemish (de Bo 1892: 564–5). The word is not attested well enough to draw further conclusions.

This leaves the four remaining stems: *bloem*, *doem*, *noem-* and *roem*. Already in the thirteenth century, \*ōm appears as <omm> in a number of lexemes, which implies that the vowel must be read as short (Mooijaart 1992: 139–41). A clear case is the suffix *-dom*, which has shortened tokens in the DAT.SG. *vrieghīdomme* (Bruges, 1287), *eghīdomme* ‘property’ (Bruges, 1288), *eyghīdomme* (Middelburg, 1294), *heighīdomme* (Assenede, 1298), *scoutedomme* ‘sheriffhood’ (Houtave, WFla., 1299), *scēpendomme* ‘aldermanhood’ (Bruges, 1300), *wiisdomme* ‘wisdom’ (Sinaai, 1299), and *wisdomme* (Duffel, 1300). Of course, the modern suffix *-dom* is the reduced variant of a second compound member \*dōma- in Old Germanic; hence, just as other heavy suffixes show reductions (e.g. the plural *-heden* of the sg. *-heid*), shortening to *dom(me)* may have been favoured by the unstressed position of the syllable.

Another instance is the verb *noemen* ‘to name, call’, where *vornommens* (Mechelen, 1297; from \*vorenōmedens) ‘aforementioned’ has a short vowel. A number of other western Dutch attestations of *vor(e)nom(e)d* as <vornomd(-)> suggest a short vowel alternating with preserved length in *vornomed-*; but we cannot be certain.

More evidence can be found in subsequent centuries. In the Bruges texts from between 1400 and 1600, Willemyns (1971: 99–101, 113) finds a shortened vowel in *blomme(n)* ‘flower(s)’, *ghenompt* ‘named’, *voornom(p)t* ‘aforementioned’, (*be*) *rommen* ‘to fame’, *verdomde*, *verdomt* ‘damned’, and *verdommenesse* ‘damnation’.

In Late Middle Dutch, there is also shortening in *rom* ‘fame’ (StDu. *roem*) in Flemish (Jan Praet, Jehan Yperman) and Hollandish texts (*rom* rhyming with *he-lichdom* in *Brendan's Voyage*), *blomme* ‘flower’ (Flemish; for Oudenaerde, see Hoebeke 1968: 218), *berommen* ‘to fame’ (Zealand), and *dommen* ‘to deem’ (Flanders). For Early Modern Dutch, Crena de Iongh (1959: 51) finds shortening in the farces by van Santen from Delft in *blompjes* ‘little flowers’, *dommelycke*, *verdomt* ‘damned’, *geromt* ‘famed’, *hy romt* ‘he fames’. The form *verdomd* ‘darned; blast!’ has entered the standard language.

The map *bloem* (FAND II/III, Map 98) shows short /ɔ/ reflecting MDu. *blomme* in the modern dialects of northern West Flanders, Zealand, western North Brabant and coastal Hollandish. Yet southern West Flanders, French Flanders, and most of North Holland have short /u/ as expected for <oe>.

No such wide-spread shortening can be observed in *duim* ‘thumb’, MDu. *dume* (FAND II/III, Map 73), not even in dialects in which \*ū is reflected by a back vowel. The element *domme-* in *dommekracht* ‘jack-screw’, dialectally also *duimkracht* (in Kampen *doemkracht*), is generally regarded as a shortened by-form of *duim* ‘thumb’ < \*pūman-. The instrument *dommekracht* is first attested in a text from 1652–62. *Dom* also occurs as a variant of *duym* ‘thumb’ in Kiliaan’s dictionary (1599), who calls *dom* “Sicambrian”. Yet whether *dom* is due to a Dutch shortening of \*ū seems uncertain, since the Proto-Germanic word for ‘thumb’ had two vowel variants, one in \*ū and one in \*u. Kroonen (2013: 550) reconstructs the noun as \*pūman-, with \*pūman- being the West Germanic variant and \*pūman- the North Germanic one. Compare, with a short root vowel, Icel., OSwe. *pumi* m. ‘thumb’, Norw. *tomme* m. ‘inch’, ODan. *thumæ* m. ‘thumb, inch’ < \*pūman- m., OSwe. *thum* n. ‘inch’ < \*pūma-; furthermore ON, Ic. *pumall*, Far. *tummil*, Nw., Da. *tommel* ‘thumb (of a glove)’ < \*pūmala-; and, with a long vowel, OE *pūma*, OFri. *thūma*, MLG *dūm(e)*, MDu. *dume*, OHG *dūmo* ‘thumb’ < \*pūman-. Early MoDu. *dom* ‘thumb’ and the dialectal word for ‘nave, hub’ (see below) provide evidence that \*pūma- existed in West Germanic, too. If these words go back to a PIE root \*teum- (thus Kroonen), the form \*pūm- represents an innovation of West Germanic, which may be explained as a case of secondary ablaut (see Kroonen 2011: 287–9). The explanation that *dom-* in *dommekracht* goes back to a form with short \*u was already preferred by Franck & van Wijk 1912. At the very least, the existence of PGm. \*pūm- means that Kiliaan’s *dom* and the compound *dommekracht* cannot be used as evidence for an inner-Dutch shortening of \*dūm- to \*dum-.

Moreover, one of the heteronyms for ‘nave, hub of a wheel’ in modern Dutch dialects (see TNZN, Map 3.6) is the lexeme *dom*, also *domp*. Its various reflexes

dominate the semasiological map of ‘nave’ for most of central Dutch, including South Holland, western Utrecht and southwestern Gelderland, all of North Brabant, Antwerp, South Brabant and most of Belgian Limburg. The variants *doem* (with regular South Brabantish short /u/ before nasals) in Antwerp and South Brabant and *domme* on Tholen (an area which did not apocopate -e) suggest an Early Middle Dutch form \**domme*,<sup>162</sup> which is unattested as such. We can be certain that \**domme* ‘nave’ represents a metaphorical development of ‘thumb’, the finger which can be regarded as the ‘pivot’ or ‘hinge point’ of the hand.<sup>163</sup> Note that the same dialects that have *dom(me)* ‘hub’ generally preserve ‘thumb’ with (the regular reflex of) long \*ū, which further disqualifies the explanation of *domme-kracht* from an inner-Dutch shortening of \**pūman-*. Finally, in order to yield short /ɔ/ in *domme-*, \**pūm-* would have been shortened before \*ū was fronted to /y:/, that is, well before 1200. In that case, the uniform character of the shortening in all Central Dutch dialects would make it different from all the shortenings of \*ō before *m*. All told, we must conclude that *domme* ‘thumb; hub’ did not result from vowel shortening before *m* but continues West Germanic vowel variation in the etymon ‘thumb’.

A likely instance of shortening before *m* is the Flemish verb *drommen* ‘to throng’ from MDu. *dromen*, the denominative to *droom* ‘joy, crowd’ < \**drauma-*. Middle Dutch mostly has *dromen* ‘to throng, insist, chase’, but also *drommen*, with a derivative *drummere* ‘pillar’ in Ghent. Early MoDu. *dromen* with a long vowel occurs next to *drommen* (in Flemish, according to Kilian) and *drummen*, mainly in Flemish and Hollandish sources. De Bo gives the verb as *drummen* for West Flemish, WZD has *drummen* for Walcheren and Zeeuws Flanders, and *drommen* elsewhere. Most likely, *drommen* resulted from shortening of MDu. /o:/ before *m*, with subsequent fronting in Flanders to *drummen*. MDu. *dromen* has been derived from \**prumi-* ‘crowd’ (see below), but it is more attractive to connect it with OS *drōm* ‘mirth, noise’, OE *drēam* ‘joy, jubilation’, of which the Middle Dutch cognate *droom* ‘crowd’ is a hapax. This noun points to WGm. \**drauma-*. It may go back to earlier \**draug-ma-* ‘host, group’ to the verb \**dreugan-* ‘to join a band, do a duty’ (Kroonen 2013: 102, Seibold 1970: 167) whence also OE *ga-drēag* ‘host’ (\**ga-drauga-*) and PGm. \**druxti-* ‘host, retinue’. Whether MDu. *dromen* continues \**u* or \**au* could be decided by modern dialect variants, but the word is not very reliably described. For West Flemish, de

<sup>162</sup>. The required WGm. preform of \**domme* is \**pūmman-*, which is slightly different from \**pūman-* as attested in North Germanic. In line with Kroonen’s explanation (2011) for vocalic ablaut ū vs. *u* in similar pairs of words, it would not be difficult to imagine that \**pūman-* : \**pūmman-* was remade into \**pūman-* : \**pūmman-*, with the frequent alternation between \*VVC and \*VCC.

<sup>163</sup>. Inner-Dutch support for this metaphor comes from the noun *duim* itself, which features in the Middle Dutch and Early Modern Dutch expression *iet(s) draait op* (*minen*, *dinen*, etc.) *duim* ‘(I, you, etc.) have a say about something, (I, you, etc.) have in (my, your, etc.) power’. Compare also one of the technical meanings of modern *duim*, viz. ‘hinge, hook of a door’ (WNT s.v. *duim*).

Bo gives *drum*, *drom*, *druim*, *droom*, *dreum* for a ‘tight crowd’, of which the variants *druim* and *dreum* are more compatible with \**drauma-*.

In many Dutch dialects, a short vowel is found in *kommen* ‘to come’ as against StDu. *komen*. In Early Middle Dutch, written evidence for *commen* is restricted to East Flanders, see Berteloot 1984a, Map 108. Hoebeka (1968: 218) notes that Oudenaerde has *comen* until 1338, but then gradually shifts to *commen* which later becomes the only variant of the verb. For Modern Dutch, *FAND II/III*: 76 comments that the long vowel of StDu. *komen* is not supported by a lot of dialects, being restricted to South Holland, southwestern Utrecht, parts of Brabant, and large tracts of Limburg. In Flanders, Zealand, coastal South Holland, North Holland and northeastern Dutch, we find a short vowel. As many have seen, *kommen* may have analogically got its short *o* from other forms of the paradigm, such as *jij*, *hij komt* ‘you come, he comes’ and *kom!* ‘come!’.

In *zomer* ‘summer’ (\**sumar*), we find no general tendency for vowel shortening, but some modern dialects do have a short vowel, especially in eastern North Brabant and in the northeast. In these regions, the shortening (or: the absence of lengthening) was clearly caused by the cluster *Cr*, as is the case, for instance, in *boter* ‘butter’ and in comparatives in *-er*; see *FAND II/III*: 112.

The position before *Cr* may also explain the frequent shortening in StDu. *jammer* ‘pity, shame’ from ODu. \**jāmar* (OHG *jāmar*, OE *geōmor* ‘sad’). The word is found as *iammer* in Flanders and South Brabant in the thirteenth century, and West Flemish still has or had *jamer* beside *jammer*. In Limburg, *jaomer* /jɔ:mər/ continues a long vowel. The intrusive *b* of MDu. *jamber* (e.g. *iamber*, EFla. 1290) must have arisen in the cluster \**mr*, that is, in inflected forms such as \**jamres* or in the verb \**jamaren* > \**jamren*. The same position before *mr* would of course also have been conducive to shortening of the long vowel. Modern High German has introduced the same shortening in *Jammer*.<sup>164</sup> Note that shortening before *mC* is more common in Modern High German than in Standard Dutch: *Himmel* – Du. *hemel*, *Sommer* – Du. *zomer*, *Hammer* – Du. *hamer*, etc.

<sup>164</sup> The shortening in \**eo-mēr* ‘ever-more’ > ODu. *iomer* > Early MDu. *immer*, *ommer* (eastern dialects), *emmer* (western dialects) > MoDu. *immer* ‘always’, *immers* ‘for’, can be due to several causes. Firstly, the second member is sometimes still spelled in full as *meer*, and can occur with main stress until early modern times; the reduction of the first member may then be due to lack of stress. In support of this, note that reduction of the stressed vowel in the indefinite compounds of \**eo-* occurs frequently. In *iemand* ‘someone’, the data of VMNW show a clear correlation between retained *ie-* plus the reduction of the second member to *men*, on the one hand, versus the reduction of *ie-* to *e-* or *i-* plus unreduced *man*, on the other. Secondly, variants such as *ember* suggest the rise of \**emr-* (e.g. in pleonastic Early MDu. *emmermee* ‘ever more’), a cluster which would have stimulated vowel shortening before it. Thirdly, the negative *nimmer*, *nemmer* ‘never’ < \**ni-eo-mēre* may also have influenced the positive.

### *Before obstruents*

Before voiceless obstruents and consonant clusters, the more recent shortenings must be separated from the Old Dutch instances of the type *kocht* ‘bought’, *bracht* ‘brought’, etc. The latter type usually encompasses all or nearly all dialects and seems to result from a strong tendency to remove syllables ending in a long vowel plus one or more obstruents from the language. Instances of this Old Dutch shortening are *bracht*, *dacht* ‘thought’, *dicht* ‘tight’, *vucht* ‘moist’, *gerucht* ‘rumour’, *verknocht* ‘attached’ (literally ‘buttoned’), *zocht* ‘sought’, *kocht*, all before /xt/. There are other cases of shortened long vowels which also look old: *vet* ‘fat’, *elf* ‘eleven’, *stond* ‘stood’, *vrind* ‘friend’, and compounds such as *bongerd* ‘orchard’ < \*boom-gaard, *lichaam* ‘body’, *vent* ‘bloke’, *wingerd* ‘vineyard’, *wimper* ‘eyelash’, etc.

Shortening before consonant clusters such as *st* and *cht* is difficult to assess in Middle Dutch because short and long vowels are not consistently distinguished in spelling in this position. Still, shortening of the kind *moeste* > *moste* ‘had to’ can be compared with that in *\*sôhte* > *zocht* ‘sought’ and with that of long vowels in compounds in its spread and its age. The form *most-* ‘had to’ as opposed to usual *moest-* is in the thirteenth century characteristic of West Brabant, both in literary texts (Liege *Diatessaron*) and in charters (in particular, from Brussels), and in view of this precise geographic restriction, *most-* may well represent a short vowel /most-/. Similarly, 3SG.PR.SB. *motte* and 2PL.PR.IND. *motti*, with a probable short vowel /o/, are only found in the Life of St. Lutgart, ms. K, from West Brabant. In the fourteenth century, *most-* appears in charters from Utrecht (1302) and Egmond (1303) (CRM14). Early MDu. *wo(e)stine* ‘wilderness’ is frequently found as *wostine* in Flanders, and in particular in van Maerlant’s *Der Natueren Bloeme*, but beside *woestine*, a form which also survived into later Flemish. For Early Modern Dutch, Crena de Iongh (1959: 51) finds shortening in the farces by van Santen before *st* in *gekostert* ‘cherished’ and *most(en)* ‘had to’, and WNT adds Flemish *wostine* (Ghent, 1548), *berosten* ‘to cover with rust’ (WFla., 1569–78), *rostigh* ‘rusty’ (Ghent, 1548), and Hollandish *verwostigheyden* ‘destructiveness’ (1583).

Boekenoogen (1897: xxx–xxxi) mentions for North Holland the shortened variants *gròp* (beside *groep*) ‘gully in a stable’, *genog* ‘enough’, *vrog* ‘early’, *most* ‘had to’, *wos* ‘washed’ (for \**woesch*), and, in texts from around 1700, *slogh* ‘hit’ (for *sloeg*), *voorspot* ‘prosperity’ (StDu. *voorspoed*), *welvernoght* ‘happy’ (for *welvernoegd*). For Overflakkee, Landheer (1951: 27) also mentions *genocht* ‘enough’, *motte* ‘to have to’.

### *Conclusions*

Shortening before *m* is only found with some frequency with \*ō, but not with other (back) vowels. This suggests that the cause may not only lie in the (length of the) *m* (alone), but also depend on the vowel. The resulting [o] in *benommen* etc. shows that the shortening was active either when the long vowel was still ODu. [o:], or when it

had diphthongized to \**uo* and already become [oə] – which was then shortened to [o]. For distributional reasons, I would favour a more recent origin of the shortening over a more ancient one. For instance, *blomme* is not found in southwestern Flanders or North Holland, which suggests that it was not a general form of all coastal dialects in, say, 1200. The occurrence of shortening in the other *ōm*-forms is even more sporadic. If we assume that shortening took place at the stage when the sequence was phonetically [-oəm-], the shortening implies the absorption of the schwa-like second element of the diphthong. In this particular position between two bilabial sounds [o] and [m], the schwa may have been more prone to loss than elsewhere.

The shortening before voiceless stops is in accordance with the general typological tendency of vowels to be shorter before voiceless stops and fricatives than before voiced ones. Within modern Dutch dialects, such shortening is a very frequent but also a very variable phenomenon, cf. *FAND II–III*: 212–5 on *roopen* and *hoek*. By extension, shortened vowels before voiceless -ch (*genoch*, *vrog*) can be due to the same phonetic cause.

All of this leaves little room for an explanation from language contact. First of all, note that the distribution of the western Dutch shortenings, as in *blomme* or *moste*, is not clearly restricted to the coastal dialects. As observed in the preceding section, Modern West Frisian has shifted OFri. \*ō to /uə/ in closed syllables before dentals but to /u:/ before velars and labials, where it was sometimes shortened to /u/ or (before *p*, *t*, *k*, *m*) to /o/: *goes* [gu.əs] ‘goose’, *hoed* [hu.ət] ‘hat’, *foet* [fu.ət] ‘foot’; *boek* [bu(:)k] ‘book’, *groef* [gru:f] ‘dug’; *blom* [blom] ‘flower’, *rom* ‘fame’. Again, the shortening before *m* must be dated fairly late (into the modern period), and may rather be due to Hollandish influence than vice versa. Whereas the wider application of shortening before *m* and voiceless stops is acknowledged by Schrijver (1999: 32–3), he still regards these shortenings as “untrivial”, and ultimately explains them from a British Celtic substrate in the western Low Countries. In British Celtic, \**m* and the voiceless stops counted as long consonants, and Schrijver assumes that these values may have been imposed on the Germanic dialects to which the previously Celtophone population shifted.<sup>165</sup> Aside from the uncertainty surrounding the shift from Celtic to Germanic, or from Celtic via Romance to Germanic (thus Schrijver 2014: 152–7), it seems to me that this implication is too far-fetched. Vowel shortening in the said positions is in fact trivial.

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<sup>165</sup> Schrijver (1999: fn. 69) also considers the possibility, suggested to him by Kortlandt, that the British Celtic substrate helped preserve the inherited consonantal length of PGm. \**p*, \**t*, \**k*, which is testified by various consonant changes in the Germanic languages, such as the High German consonant shift.

### 17.3 Coastal Dutch *eu* from \*ō without mutation factor

Van Loey (1976: 52) adduces three Middle Dutch words from Hollandish texts which spell <ue> for the back vowel which is normally written as <oe>. The rhyme seems to show that <ue> was pronounced as a front vowel [ø:], though van Loey himself harbours some doubts, cautioning that it may have been the optical identity of the written verse-final words which counted for the scribes. In modern dialects, there is widespread evidence for unconditioned fronting of \*ō in the words ‘Wednesday’ (discussed by Kloek 1936) and ‘beech’. Verdenius 1943 discusses some additional seventeenth-century forms with *eu* for usual *oe*. He concludes that *i*-mutation formerly reached further westward into traditional Hollandish dialects than can presently be seen. Taking a different stance, Schrijver (2008: 198) adduces some of the evidence discussed below to claim that “part of eastern Zuid-Holland and Utrecht<sup>166</sup> show lexical relics with unconditioned palatalisation of \*ō > ō > ø”. Here is the relevant evidence:

1. *beuk* ‘beech’. It is impossible to determine the exact West Germanic predecessor of each of the cognate forms. For instance, OHG *buocha* may reflect WGm. \**bōkō-* or \**bōkjōn-* (cf. *EWAhd* II: 437–42). The Dutch dialectal forms show a unique distribution which has been repeatedly discussed in the literature. In very general terms, we find *i*-mutation in central and eastern dialects: *beuk*, *buuk*, etc. In Flanders, Zealand and Holland, Standard Dutch *beuk* is the expansive form, which is opposed to back-vowel forms such as *boek*, *book*, which are on the retreat. Taeldeman (1992: 450–7) offers what seems to me the most comprehensive and most satisfactory discussion so far. He compares the different dialect enquiries from the nineteenth and twentieth century and shows that important changes have recently taken place in the western dialects which are relevant to our investigation. In the oldest data – which in Holland stem from the Kern enquiry of 1879 and in Flanders from the Willems enquiry of 1885 – we find *boek* in seven Hollandish dialects, among which is Oude Tonge on Goeree, and *book* in Scheveningen. In the RND from the middle of the twentieth century, the meaning ‘beechwood’ is still given with a back vowel *oe* for 18 – mainly village – dialects in North and South Holland,<sup>167</sup> once in

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<sup>166</sup>. This geographic restriction is not clear to me. For instance, *Weunsdag* is found in Zealand and in western dialects of South Holland.

<sup>167</sup>. See Taeldeman 1992: 452, fn. 18: Valkoog, Jisp, Heiloo, Beverwijk, Koog, Zandvoort, Hoofddorp, Ouderkerk in North Holland, Maartensdijk in Utrecht, Noordwijkerhout, Lisse, Warmond, Leimuiden, Scheveningen, Gouda, Schipluiden, Vlaardingen, Krimpen and Dubbeldam in Sout Holland; Groede, Aardenburg, Sint-Kruis and Westdorp in Zeeuws Flanders.

the province of Utrecht, and four times in Zeeuws Flanders. Boekenoogen (2004: 48) confirms that *boek* used to be the normal North Hollandish word for ‘beech’. By the time of the *GTRP* database, in the 1980s, only *beuk* is found in Holland and Zealand. A similar ousting of *boek*, *book* by *beuk* can be detected in Flanders. In earlier enquiries, such as that of Willems and another one from 1921, most of West Flanders and western East Flanders have a back vowel in ‘beech’ and its compounds. The same is true for the *RND*, as shown by the map in Taeldeman (1992: 451); see also *PLAND* s.v. *beuk* for a complete collection of dialect enquiry data. But in the *GTRP* database, back vowel forms survive only sporadically in French Flanders, southern West Flanders, and the southwest of East Flanders. Conversely, Taeldeman has found that *i*-mutated forms of the type *buuk*, unrounded *biek*, were originally at home in the eastern part of East Flanders. In Flanders, too, *beuk* is in the process of ousting the deviant forms.

This distribution is confirmed by older attestations. A back vowel surfaces in *bouke* /bu:kə/ and *boeke* (rhyming with *bezoeko* ‘visit’) in Maerlant’s *Der Natueren Bloeme* (WFla., 1287). The evidence of place-names with ‘beech’ as their first member is ambiguous, such as the East Flemish toponym *boukle*, *boekle* (13th c.) ‘Boekel’ < \**bōkō-lauxa-* and modern names such as *Boekhoute* (EFla.), *Boechout* (Antwerp), *Bocholt* (Limburg), *Boekel* (North Brabant), *Boekelo* (Twente), all with back vowel realizations in the modern dialects (Debrabandere et al. 2010: 46, van Berkel & Samplonius 2006: 64–5). Since the eastern dialects show no *i*-mutation here, the preform probably lacked an *i*-mutation factor. For Kiliaan (1599), both *boecke* and *beucke* were current forms.

I follow Taeldeman in his historical interpretation of the data. Firstly, we may assume regular *i*-mutation from \**bōkjōn-* in inland Dutch *beuk(e)*, and the equally regular absence of secondary *i*-mutation in the original coastal Dutch reflex \**bōkə* > *boeke*, *booke*. Secondly, the form *beuk* – which has been ousting the back vowel variants from the western dialects since the Late Middle Ages – did not arise through spontaneous fronting of /o:/, but represents the actual *i*-mutated form of the eastern neighbours of coastal Dutch (Taeldeman 1992: 453). The regular presence of *i*-mutation of \**ō* in the Gooi region, e.g., in Huizen and Laren, not far from Amsterdam, shows that *beuk* was indigenous in the easternmost parts of Holland. The presence of *i*-mutation in eastern East Flanders has been demonstrated by Taeldeman. Taeldeman also gives a possible extra-linguistic reason for the large-scale adoption of an inland Dutch word for ‘beech’ by the coastal dialects (p. 456). The beech tree was originally at home in the higher areas of the central and eastern Low Countries, but in the west, it only occurred in larger numbers in the dunes. Hence, when beechwood became much more sought after in the sixteenth and seventeenth centuries, it had to be imported from the woods in *i*-mutating *beuk*-areas.

2. *boezem* ‘bosom’. I was unable to find *eu*-forms for *boezem* ‘bosom’ < \**bōsma-* in literary texts. *Beusem* ‘bosom’ does occur in the modern dialect of Hoeksche Waard (HWW 64) in South Holland. Other *oe*-words in this dialect, however, either retain *oe* or have a back diphthong *ou* (i.e. before velars and labials).
3. *broer* ‘brother’ is found as *breur* and in the compound *kittebreur* ‘tippler’ with Bredero (at least ten times), as well as with other Hollandish farce authors and poets of the seventeenth century. The word can stand both within and outside of the rhyme. In all cases, *breur* means ‘male direct relative’, not ‘monk’. The maps of Dutch dialect forms in van Ginneken 1932–33 and TNZN 5.4 show a rounded front vowel in most of central and eastern Dutch with the exception of Limburg: Groningen *bruier*, Utrecht, northern Guelders, Overijssel, Drenthe *breur*, southern Guelders, Brabant *bruur*. The border between this area and the western dialects with *broer* (Holland, Zealand), *broere* (Flanders), roughly follows the same course as the isogloss between *groen* and *i*-mutated *greun/gruun* from \**grōni-*. The absence of *i*-mutation in Limburg (and, more generally, in Germany except Cleves/Guelders) is striking. Van Ginneken ascribes the fronting in the other dialects to the combined influence of the preceding and following *r*'s, but that would imply that fronting took place after the loss of intervocalic *d*, generally after 1400, which renders the wide spread and the similarity of the western limit to the general *i*-mutation isogloss difficult to explain. Hence, we must probably be dealing with *i*-mutation after all, from an alternating paradigm of which Limburgian generalized the unmutated variant. Whereas there originally was no *i*-mutation factor in WGm \**brōbar*, *i*-mutation was analogically introduced in the plural in Middle High German (*briüeder*, Paul, Klein, Solms & Wegera 2007: 189) and in Middle Low German (Lasch 1914: 203). Apparently, the central and eastern Dutch dialects shared in the development of a paradigm with sg. \**bruoder*, pl. \**briüeder*.

The form *kittebreur* is a pejorative denomination, and it might be suggested that the word *breur* was taken in this form from rural dialects of Gooi or further east, where *breur* was native. Was *breur* so successful in Amsterdam because of lexical differentiation between ‘male relative’ and ‘monk’? For Delft, where *breur* is found in van Santen's *Graefs-wandelpraetje* from 1626, Crena de Longh (1959: 52) assumes that it was not a local dialect form for two reasons: because it may have been used by van Santen to convey an eastern ‘couleur locale’ to the text, and because the grammarian Montanus from Delft (in his *Spreekonst* from 1635) attributes *breur* to the city of Dordrecht. The latter location would match with the observations of Brouwer (2001: 202–3), i.e. that fronted variants of ‘brother’ survive in surnames in South Holland and adjacent western Dutch dialects. The name *Breur* belongs to the delta of the Waal, Merwede and Meuse (Rotterdam, Hardinxveld-Giessendam, Overflakkee), with the

variants *Breure* (from Rotterdam to North Beveland) and sporadically *Breuren* (south of Amsterdam). *Jongebreur* is especially found in southeastern South Holland (where it is already attested in Nieuwerkerk aan de IJssel for a man born in 1533), *Bestebreur* in Hoekse Waard and *Bestebreurtje* in Rotterdam – IJsselmonde. Thus, for Brouwer, *Breur* is a relic form which confirms that a front-vowel variant of *broer* used to be current in parts of South Holland.

The question then to be answered is whether *breur* was imported from Brabant and Guelders, or whether it arose internally from earlier \**brō(de)r*. In CRM14, texts from Holland and Zealand generally spell ‘brother’ as <bro(e)der> with a probable back vowel and with retained *d*; Overijssel, Guelders, Brabant and eastern East Flanders mostly have <*bru(e)der*>, which we can interpret as the fronted reflex on the basis of the modern reflexes. This – and the absence of *breur* from names in North Holland and northern South Holland – means that *breur* must have arisen in South Holland and northern Zealand between 1400 and 1600. It seems unlikely, then, that *breur* reflects an Old Dutch, coastal fronting of \**ō* – although we can never be absolutely sure.

4. *geneugte* ‘joy, pleasure’, *ongeneucht* ‘sadness’. Originally these represent two different nouns, viz. \*(*un-*)*ga-nōg-idō-* and \**ga-nuxti-* (OHG *ganuogida* vs. *ginuht*). An early western form with front vowel appears in a poem by Willem van Hildegaebersberch (South Holland, first half of the fifteenth century): *Het waer een onghenuecht / lieve gasten te sien onthuecht* ‘it would be sad to see dear guests saddened’, where *onthuecht* belongs from the verb *ontheugen*, literally ‘to de-joy’. However, the same word ‘saddened’ also occurs as *onthoocht* in another poem by the same poet, and the *oo*-vocalism may be historically older in western Dutch. In his poem nr. 111, we find the lines 5–6 *Dat maect int leste onghenuecht. / Werck ic salicheit nocthe duecht* ‘That will eventually bring dissatisfaction. / If I accomplish bliss nor virtue’, where the rhyme with *duecht* leaves no doubt about the /*ø*:/. But in poem 100 ‘Van ghenoechten’, the word is always spelled with <*oe*>. With <*eu*>, *ongeneucht(e)* is found in the seventeenth century with authors such as Hooft, Vondel, De Brune, Cats, and Roemer Visscher. This renders it at least possible that the *eu*-forms co-occurred with *oe*-forms in the speech of van Hildegaebersberch, and that he could use either variant depending on his needs. In Modern Dutch, *geneugt(e)* has become the standard form. Verdenius (1943: 205) holds that the variant *genoegte* was replaced by the noun *genoegen* ‘pleasure’, while *geneugt(e)* was kept in the literary language because it was useful in rhyme.
5. *groep* ‘group’. I was unable to find the form *greup* cited by Schrijver (2008: 198). Since *groep* was borrowed from Italian *gruppo* or French *groupe* in the sixteenth or seventeenth century, any dialect having *greup* in its place would show that the *eu* is of recent origin. A different word seems to be reflected by the hamlet

*Greup* in Hoeksche Waard, attested as *Group*' in 1639 and *Groep* in 1866 (van Berkel & Samplonius 2006: 157). The word may be identical to MDu. *groepe* which survives as dialectal *groep* 'gutter for cow's dung' in the area (*HWW*) and as *groepe* in Zealand. Thus, it appears that the change *oe* > *eu* in *greup* in Hoeksche Waard was very recent.

6. *moei* 'female relative', mostly 'maternal aunt', sometimes 'niece, mother-in-law' (< WGm. \*mōjō-, cf. MLG *mōie*, OHG *holz-muoia* 'witch'). The three instances from Holland in the thirteenth century have *moye*, *moie*. Fronted forms only appear in Holland after 1600, e.g. with Coster (1615, 1619) as *meuy*, with Bredero (1613) and Cats (1635) as *petemeuy* 'godmother', with van Santen (1620, 1626; see Crena de Longh 1959: 52) as *meuy*, *meutgen* and *meutje*, with Westerbaen (1653) as the diminutive *meute*, and also in later texts, such as van Effen (1732) *meuytje*, Wolff and Deken (1793) *meu*. The word is not found in Boekenoogen 2004 but appears in Pannekeet 1984 as *meut* 'old aunt, old woman, busybody' for West Friesland, and in *HWW* 170 as *meu* 'aunt, great-aunt', *meuzegger* 'nephew, niece' (lit.: 'aunt-sayer'), *meut* 'elderly dressed girl, old tart' for Hoekse Waard.
7. The family name *van Meurs*, adduced by Schrijver (2008), refers to the city of *Moers* near Dusseldorf. The surname *Meurs*, which might indeed be due to palatalization from a patronym *Moor-s*, as surmised by Schrijver, concentrated in Guelders and West Friesland. Hence, it does not belong to western Dutch.
8. *roekeloos* 'reckless' < \*rōkō-laus-, with *i*-mutation in eastern dialects taken from the verb \*rōkjan-, cf. *ruecklois* in *Teuthonista*. The word is found with a front vowel as *ruekelois* in Dirc Potter's *Der Minnen Loep* (I, 1123, not in rhyme), which may well be due to the German coloration for which this text is famous. In the seventeenth century, a front vowel is more frequent, though it is still less frequent than *roekeloos*.
9. *roeren* 'to move' < \*xrōzjan (OFri. *hrēra*, MoHG *rühren*, ON *hræra*). In modern dialects, central and eastern Dutch have *i*-mutation whereas Flanders, Zealand and Holland show a back vowel (*FAND III*, Map 108). But in North Holland, *reuren* is the normal form in traditional dialects (Boekenoogen 2004). In Early Middle Dutch, Flanders and Holland spell the vowel as <*o*>, <*oe*> or sporadically <*ou*>, but never as <*ue*> or <*eu*>, which suggests that they had a back vowel all along. Similarly, in the charters from Holland of the fourteenth century, we find only *ro(e)ren*. In the fifteenth century, *rueren* starts to appear with some Hollandish authors, such as Dirc van Delf, Dirc Potter, Melis Stoke and Willem van Hildegaersberch. In the sixteenth and seventeenth centuries, several plays published in Haarlem and Amsterdam have *rueren*, *reuren*, and Jan van Hout (Leiden, late 16th c.) has (*be*)*rueren*. These occurrences suggest that the *ue*-spellings in the fifteenth century were not only due to German coloration, but represent actual Hollandish forms of the period.

10. *toeven* ‘to spend time, stay in’ < \**tōbjan*, normally with a rounded front vowel from the province of Utrecht (along the Vecht) eastwards. It is also found as *teuven* ‘to wait; stop’ in traditional dialects of North Holland (Bouman 1871, Boekenoogen 2004: 527), with no variant *toeven* beside it. *Teuven* also occurs in Hooft’s *Warenar*, where the *eu*-sound is confirmed by the rhyme (Verdenius 1943: 202). In Potter’s *Der Minnen Loep* (in a ms. from 1470–90), we read *so tuefden si* ‘thus they halted’.
11. *voegen* ‘to fit; decide’ < \**fōgjan*. In *Der Minnen Loep*, the verb *voegen* occurs with <oe> and <ue>. The latter variant is often – but not exclusively – found to rhyme with *genoegen* ‘to please’ and the nouns *genoecht(e)* ‘pleasure’ and *deugd* ‘virtue’.<sup>168</sup> However, the variant with <oe> is also twice attested in rhyme.<sup>169</sup> Although the vacillation between <ue> and <oe> for the vowels /o:/, /u:/ and /ø:/ is in itself a current phenomenon in Middle Dutch manuscripts, the preponderance of <ue> for a verb that usually has a back vowel in the west is striking. Furthermore, it is well known that Dirc Potter has introduced a large number of Germanized forms in his text, as part of the so-called “German coloration” of manuscripts written in The Hague in this period of Bavarian overlordship (ca. 1360 to 1430), cf. de Haan 1999: 59–79. Hence, it is conceivable that the variant *vuegen* mimics High German *fügen*, and is another instance of the German coloration of *Der Minnen Loep*.

In the poem *Vander losen vrou* (Den Haag, ms. KB 75 H 57; mid-15th century), the verb occurs in rhyme on two occasions: 1–2 *Waer natuer twe harten vuecht / Te samen mit gherochter doecht*, and 13–14 *Want reden is int recht ghevuecht / Dats den goeden wael ghenucht*. The earliest of the Golden Age authors who used *veugen* seems to have been Jan van der Noot (ca. 1539–after 1595), from near Antwerp. Hence, *veugen* may have been his regular Brabantish form. We sometimes find *veugen*, *geveucht* in the seventeenth century, e.g. with Bredero, Vondel, Roemer Visscher. The rhyme confirms the *eu*-sound (Verdenius 1943: 203).

<sup>168</sup>. Here is a selection of lines in which the <ue>-forms occur: I 175–76 *Dan des den enen wael ghenoecht / Daer toe him die ander vuecht*; I 691–92 *Daer drevēn si al hoer ghenoecht, / Als sulken jonghen luden vuecht*; I 1399–1400 *Der vroukijn sijn op deser tijt vele, / Die him gaerne vueghen tallen spele*; I 1487–88 *Want hi ghetruwede hoir alre duecht. / Lucrecia heefster soe ghevuecht*; I 1783–84 *Hy was guetlic inder tael, / Alle sijn leven vuechde him wail*; I 1897–98 *Ende dede sijn dinck alst him ghenoechde. / Calistomus hem naerstelic vuechde*; I 1905–06 *Op dat haer te bet mocht ghenoeghen. / Wint ende weder waren ghevueghen*; I 1930–32 *Ende dan sal icken boven leyden, / Ende vueghen onse ghenochte te samen, / Als wy vriendelicste connen ramen*; II, 1781–82 *Pelops seyde: ‘Laet di ghenuueghen; / Ic sal di tavont bi haer vueghen.’*

<sup>169</sup>. I 1883–84 *Dat hi him tot di wil voeghen / Ende leven slechs na dijn ghenoeghen*; III, 719–20 *Waer quaet, mochtment ande[r]s voeghen. / Si sprac: ‘Mirra, laet u ghenoeghen.*

12. *voeren* ‘to lead; treat’ < \**fōrjan*. Eastern and Central Dutch forms of *vueren* are found as expected in Middle Dutch. Van Loey (1976: 52) adduces from lines 1477–8 of *Der Minnen Loep* the participle *ghevuert*, which rhymes with *ghebuert* ‘it was his turn’, pointing to /ø:/. We can be reasonably sure that *ghevuert* is another instance of the German coloration in this text. Other Late Middle and Early Modern Dutch attestations with <ue> or <eu> are all from Brabant or Guelders and can therefore not be used. The dialectal origin of the war song which contains the following lines is unknown: *Het was wel stout gheavontuert / Op s'vyants bodem krijch ghevuert* ‘It was a rather bold adventure / to give battle on the enemy’s territory’ (ca. 1600).
13. *woensdag* ‘Wednesday’. See § 19.2 below for a more detailed discussion of this word. A variant *weunsdag* is found in traditional dialects of Holland and Zealand and in East Flanders. Whereas the latter area might have *eu* from the palatalising effect of *j* < *d*, the Zealandish and Hollandish forms must be due to unconditioned fronting of *ō* to *eu*. It is conceivable that the preform \**wōdnesdag*, which underlies many western dialect forms (cf. Pijnenburg 1980: 152), was shortened to \**wodnesdag* (cf. with metathesis *dn* > *nd* in *wondesdach*, Bruges 1271), whence with assimilation \**wonesdag*, and, with western unconditioned fronting and open syllable lengthening of the type *zeun*, in particular before *n*, to *weunsdag*. Later, this would have been superseded by inland Dutch *woensdag*.
14. *zoet* ‘sweet’ is found as *seuter* ‘sweeter’ in the colloquial speech of the nurse in Coster’s play *Isabella* from 1619, line 127 (Verdenius 1943: 202), rhyming with *kleuter*. The expression *zeute kynd* ‘sweet child’ in the farce *De Gewaande Weuwenaar, met het Bedroge Kermis-Kind* (1709) is probably rendering Utrecht city dialect and may belong to the *i*-mutation area. It is to be noted that *suet* already occurs in some Late Middle Dutch texts from Holland, e.g. in *Van de proprieteyten der dingen* (Haarlem, 1485), in Dirc Potter’s *Bouck der bloemen*, in Dirc van Delf’s *Tafel van den kersten ghelove* (usually *suet*, not *soet*), with Willem van Hildegaebersberch (once), and in the Tübingen ms. of *Ons Heren Passie*, which originates from North Holland (*o zuete heer*). These are all literary texts, and the *ue*-vowel may be a stylistic means to lend solemnity to the expression. In modern dialects, *i*-mutated forms of ‘sweet’ occur in all eastern and central dialects up to and including the Gooi area (Huizen, Laren). Thus, the isolated instance in Coster’s *Isabella* may have been taken from those dialects.
15. *Pace WNT* s.v. *reuf*, North Hollandish *reuf* ‘oilseed, cole-seed’ (Boekenoogen 1897: xxxi) *reuf* and *reufseed* ‘turnip seed’) is probably unrelated to northeastern Dutch *reuve* ‘turnip’ < \**rōbjōn-* (MoHG *Rübe*; Kroonen 2013: 415). *Reuf* represents a rounded variant of local *reef*, the regular correspondent of MoHG *Rebe* ‘vine’, MDu. *reve* ‘shoot, vine’. Rounding of lengthened *e* in open syllable, particularly in the neighbourhood of labials, is frequent in Hollandish.

## Summary

The evidence can be divided along the following lines:

- a. With local, recent fronting: *beuzem*, *greup*. The reflex /ø:/ shows that we are dealing with fronting of earlier /o:/, not of /u:/. One is tempted to see the neighbouring labial consonant (*b*-, *-p*) as a condition for the fronting, also in view of *meui* and *teuven*, which also have a preceding or following labial consonant. A parallel can be found in the southern part of French Flanders, where \*ō was fronted to /y:/ only before a labial consonant, as in *ruopen* ‘to call’, *bluumē* ‘flower’ (Taeldeman 1979: 68). Of course, in Hoekse Waard, the fronting is not at all regular.
- b. Probably with conscious German coloration: *ghevuert*.
- c. Good evidence for ō > eu, but only in (selected) literary texts between 1400 and 1700: *geneugte*, *reukeloos*, *veugen*, *zeut*. With *zeut* we are clearly dealing with the stylistically motivated importation of an eastern, *i*-mutated form. For *geneugte*, *reukeloos* and *veugen*, the same can be claimed for at least some of their literary occurrences, so that their seventeenth-century tokens probably also belong here.
- d. Good evidence for ō > eu in western dialects and in literary texts: *beuk*, *breur*, *meui*, *reuren*, *teuven*, *weunsdag*. The words *beuk*, *breur*, *meui*, *reuren*, *teuven* have *i*-mutation in (large parts of) inland Dutch (albeit not well attested for *meui*), whereas *woensdag* does not.

Obviously, group (d) is the most interesting one for the Old Dutch period. In *weunsdag*, palatalisation is oldest, and is found from North Holland to southern Flanders. If it is due to unconditioned fronting of a short \*o or (in Flanders) due to *d* > *j*, it is irrelevant here. In the other five words, the *eu*-vocalism in coastal Dutch is more recent than the *oe* which is attested in the case of *boek* ‘beech’, *broer* and *roeren*. In *meui*, *reuren* and *teuven*, the fronting is restricted to South and North Holland, maybe also northern Zealand. In *beuk*, the introduction of the *eu*-form from inland Dutch seems a plausible explanation. For *breur*, *meui*, *reuren*, *teuven*, this is possible (because inland Dutch has *eu*-vocalism in these words) but cannot be supported by the attestations, and is also unsatisfactory from a sociolinguistic point of view: why would coastal Dutch have adopted an eastern form for a number of words in \*ō, but not for other vowels? Thus, the alternative explanation of an internal tendency within (particularly) Hollandish to front Early Middle Dutch /o:/ to /ø:/ must be admitted. This tendency may be connected with the coastal Dutch tendency (observed above in § 15.3.4, summary 3) to front the product of lengthening of \*u in open syllables, yielding western *zeumer* ‘summer’, *reuk* ‘smell’, etc. Part of the words with inherited \*ō would then have joined in this tendency,

especially in the neighbourhood of rounding consonants (*b*, *m*, *v*, in Dutch also *r*), which can be regarded as an additional dissimilatory factor.

### 17.4 North Hollandish *ja, aa* from \*eu

In Old Frisian, PGm. \*eu developed into *iā* unless an *i*-mutation factor followed, in which case we find OFri. *iū* (Siebs 1901: 1234, Bremmer 2009: 29). The second element of the diphthong *iā* merged with OFri. *ā* which had arisen from other sources, such as WGm. \*au and \*ai. From ca. 1450 (thus Versloot 2012: 109), Westerlauwers Frisian /a:/ started raising to /ɛ:/, which eventually, around 1700, yielded /i.ə/ written as *ea*. Examples include MoWF *tsjeaf* ‘thief’ (WGm. \**þeuba-*), *tsjeak* ‘jaw’ (\**keukōn-*), *tsjea* ‘thigh’ (\**þeuxa-*). With the frequent loss of *j* after *l* and *m*, we find, for instance, *fleane* ‘to fly’ (OFri. *fliān* < \**fleuxan-*), *lea* ‘limbs’ (< \**liā* < \**litha*), *leaf* ‘dear’ (OFri. *liāf* < PGm. \**leuba-*), and *meane* ‘to mow’ (OFri. *miān*); see Hoekstra 2001: 728. A few North Holland dialect words show traces of this Frisian development of WGm. \*eu to *iā* and *ā*, though they lack the subsequent raising to /ɛ:/ or /i.ə/. They confirm that the raising of /a:/ had not yet started in westernmost Old Frisian when North Holland was defrisianized in the thirteenth century.

1. *jaar* ‘udder’. As explained in detail in § 9.4 nr. 9, MoWF *jaar* ‘udder’ goes back to Old Frisian \**jāder* from PGm. \**eudr-*. The form *jaar* is also found in North Holland and it clearly represents a loanword from the Frisian substratum. There are also some sporadic attestations of a variant *jadder* in the seventeenth and eighteenth centuries. The short vowel and retained *d* in *jadder* can be explained from shortening of the long vowel before *dr*.
2. *tjad* ‘quick, lively’. As an adjective, *tjat* is first attested in a text from 1698, but the derived adverb *tjats* ‘playful, fiery’ occurs several times in the works of Bredero and Hooft in the early seventeenth century. Heeroma (1948: 12) regards *tjad* as an old Ingvaeanic word which he connects with Gothic *þiups* ‘good’ (< PGm. \**þeuda-*). Since initial *p*- would have become *t*- in Frisian (compare coastal Dutch *tille*, *til* ‘little wooden bridge; dovecot’, loanword from OFri. \**tilla* < PGm. \**piljōn-*), \**tiād* would have been the regular Old Frisian outcome of \**þeud-*. The features *t*- and *ja* and the geographic restriction to North Holland render an Old Frisian origin of *tjad* inescapable (Bremmer 2012: 141).
3. Toponyms in *Tja-*. Gysseling (1962: 21) mentions the North Hollandish place-names *Tjaddinkrijtje* (in Oude-Niedorp) and *Tjaarlingermeer* (in Warmenhuizen) as possible derivatives on the basis of an Old Frisian personal name \**Tiāde* from WGm. \**þeudan-*. He is more hesitant about *Tjallewal* (Schagen) because the etymology is less clear.

4. *vlaar* ‘elder(berry)’.<sup>170</sup> The plant is called *vlier* /vli.r/ in Standard Dutch and *flear* /fliər/ in Modern Westerlauwers Frisian. These forms developed from WGm. \**fleoþra-*, which only has descendants in Low German (the earliest being the Old Saxon toponym *Fliadarloh*), Dutch (ODu. *Fliether-*, *Flither-* in toponyms), and Frisian. For Old Dutch, we must assume paradigmatic alternation between the NOM.ACC. \**flioder* and the oblique cases such as the GEN.SG. \**fliodres*. In the former variant, intervocalic *d* was often syncopated in modern dialects. The variant \**fliodr-*, on the contrary, preserved the *d*, and the stressed vowel was often shortened before the cluster. These changes explain much of the dialectal variation which is described in van Sterkenburg (1975: 203) and *PLAND* s.v. ‘gewone vlier’. Dialectal *vlier* and *vleer* continue \**flioder*, whereas *vledder* reflects the outcome of the oblique case forms such as genitive \**fliodres*. Flemish *vliender* has introduced *n* and can go back to either of the Old Dutch forms.<sup>171</sup> The expected but unattested Old Frisian descendant would have been \**fliathar*. Via \**fljāþhar* and \**flāþhar* (with loss of *j* after *l*), this would yield Late Old Westerlauwers Frisian \**flār*. Such a preform would directly explain the attested modern forms, MoWF *flear*, dialectal [flɔ.ər] in Hindeloopen, [flö.ər] in Wouden and Gaasterland.

The dialectal forms in North Holland correspond closely to the Frisian ones. The noun itself is *vlaar* or *vlaarboom* in modern dialects of Zaanstreek, Waterland and West Friesland, with an older variant *vlaarde*, *vlaardeboom*; cf. Boekenogen 2004: 569. As regards family names derived from ‘elderberry’ attested throughout the Dutch linguistic area, *Vlaar* is the typical variant of West Friesland (first attested as *Vlaer* in 1647), compare also *Vlaarkamp* in Castricum (NHol.). These names confirm the dialectal appellative *vlaar(de)*. It follows that ‘elderberry’ was borrowed into North Hollandish at the stage NOM. ACC. \**flāðer*, GEN. \**flāðres*. Syncope of word-internal *d* yielded the variant *vlaar*, whereas the metathesis *dr* > *rd* gave *vlaarde*.

5. *vlaremuis*, *vlaardemuis* ‘bat’. Standard Dutch has *vleermuis*, MDu. *fledermūs* (cf. German *Fledermaus*), from \**fleþar-* ‘wing’ and \**mūs* ‘mouse’. The North Hollandish word is first attested in 1711 as *vlaremuySEN* (PL.); its *aa*-vocalism cannot be explained on the basis of the Franconian *ee*-forms. Again, a Frisian origin seems likely. Modern Westerlauwers Frisian has *flear(e)mūs*, nineteenth century *flermuws*, and among modern dialects we find Hindeloopen

<sup>170</sup> For a more extensive analysis of the data, I refer to de Vaan (2013a), of which the present subsection is a summary.

<sup>171</sup> See De Grauwe (2005: 58–61) for the epenthetic *n*.

[flɔ.ərəmüs], Schiermonnikoog [flɪ.ərmüs], Terschelling [flɪ.ərmüs]. Whereas *flear-* can go back to \**flebar-* ‘wing’ (cf. Miedema 1970), the Hindeloopen form rather points to OFri. \*ā or to lengthening of short \*a. Possibly, \**fleparmūs* was replaced in Old Frisian by \**flaparmūs* on the model of the verb ‘to flutter’, which is attested in North Frisian as *fladre*, *flare*. A preform \**flaparmūs*, borrowed into North Hollandish, would directly explain attested *vlaardemuis* and *vlaarmuis*.



WGm. \* $\bar{a}$ 

WGm. \* $\bar{a}$  yields *aa* /a./ in standard Dutch, as in *schaap* ‘sheep’, *jaar* ‘year’, *raad* ‘council’, *laten* ‘to let’. Some words in coastal Dutch show a high vowel reflex *ee* or *ie*. Several scholars have suspected that such words were influenced by or borrowed from Proto-Frisian. WGm. \* $\bar{a}$  usually yields /e:/ in Old Frisian, whence *ie* /iə/ in Modern Westerlauwers Frisian: *skiep* ‘sheep’, *jier* ‘year’, *ried* ‘council’. Before we can discuss the alleged evidence for this development in western Dutch, there are some dialectal complications to review.

Zealand north of the Westerschelde, southern South Holland, West Friesland, and other rural dialects of Holland, generally have a front vowel /ɛ:/ or /æ:/ as a reflex of both WGm. \* $\bar{a}$  (Schönfeld & van Loey 1970: §80, Goossens 1981: 25–7, *FAND* III) and of the product of open syllable lengthening of short \**a*. Both of these West Germanic phonemes have usually merged into one vowel in modern western Dutch, but in at least part of central and eastern Dutch, long \* $\bar{a}$  and lengthened \**a* yield two different phonemes (Goossens 1981: 59–60). The modern dialect situation can easily be retrieved from the dialect atlases, but it is uncertain how the present linguistic landscape developed in earlier centuries.

In North Holland, most of the /a:/’s which existed in (Late) Middle Dutch were susceptible to raising, see the examples below. Still, there are some striking exceptions to this raising. The chronology of the raising and merger in North Holland is also uncertain. Two possibilities present themselves: (1) \**a* was first lengthened in open syllable before it was raised to the same height as original \* $\bar{a}$ ; (2) inherited \* $\bar{a}$  was first lowered to /a:/ (as in Central Dutch dialects) before merging with lengthened \* $\bar{a}$  and then raising to /æ:/. These two scenario’s are presented in Table 43 by models A and B:

Table 43. Two models for the coastal Dutch raising of *aa* to *ee*

Model A	Model B
stage 1: /a/ vs. /æ:/	1: /a/ vs. /æ:/
stage 2, o.s.l.: /a:/ vs. /æ:/	2, lower: /a/ vs. /a:/
stage 3: raise: /æ:/ = /æ:/	3, o.s.l.: /a:/ = /a:/
stage 4: raise: /ɛ:/	4, raise: /æ:/
	5, raise: /ɛ:/

For Zealand, written evidence for an early, medieval raising of /a:/ to /æ:/ and higher is lacking. The modern, written standard language rarely allows <ee>-spellings for words with inherited \* $\bar{a}$ .

Van Loon (2014: 95–6) assumes that the geographic difference between Middle Dutch *brochte* (in coastal Dutch) and *brachte* (in central and eastern dialects) ‘brought’ was caused by the underlying vowel system of coastal Dutch. This system would have contained the long vowels /æ:/ and /o:/, but not /a:/ (see § 12.2.5). If correct, van Loon’s view would imply that we have independent structural evidence for a fronted realization of WGm. \* $\bar{a}$  in southwestern dialects of Early Old Dutch. Yet, as I have argued in § 12.2.5, it seems unlikely that Old Franconian /a:/ was adopted as /o:/ in coastal Dutch only before *cht*, whereas all other /a:/’s were adopted with /a:/. I therefore assume that the vowel of \**bräxte* ‘brought’ was still nasalized when it was adopted by the coastal dialects as a rounded vowel in \**bröxtē*. As a result, the sequence WGm. \*-anxC- cannot inform us about the quality of WGm. \* $\bar{a}$  in western dialects.

It remains to be seen whether the fronted reflexes *ee* and *ie* in coastal dialects directly go back to the realization \*/æ:/ which we reconstruct for the Early Old Dutch long vowel system. Some scholars have argued that the similarity in long front vowel raising between Old and Modern Frisian, on the one hand, and modern coastal Dutch, on the other, was accidental or reflects systemic pressures independently at work in both areas (Heeroma 1935). The results achieved by Versloot 2012 have now effectively made this view obsolete. He shows that the raising of WGm. \* $\bar{a}$  in Holland goes together with the raising of lengthened reflexes of WGm. short \**a*, and it never progresses beyond the mid-vowel stage /e:/. Also, there are words which show Hollandish /e./ for StDu. /a./, but which have a different vowel than /e:/ in Old Frisian (viz. /i:/, /o:/, /a:/, short /e/). In addition, some Old Frisian words can be ruled out as sources of coastal Dutch words altogether because of their different consonantism. Examples of such vocalic or consonantal differences given by Versloot (2012: 106) include Dutch *kaas*, North Hollandish *kees* vs. OFri. \**tsēze* ‘cheese’; Du. *maan*, NHol. *maan*, *meen* vs. OFri. *mōna* ‘moon’; Du. *gaan*, NHol. *geen* vs. OFri. *gān* ‘to go’; Du. *baard*, NHol. *beerd* vs. OFri. *berd* ‘beard’. Such words show that Old Frisian words were not the input for the *ee*-reflexes found in (North) Holland dialects.

Instead, Versloot assumes two separate – though maybe not independent – processes of raising, one in Holland and the other in Fryslân. He claims that an identical raising of the phoneme /a:/ via /ɛ:/ to /e:/ and /i:/: (in Frisian, to /i.ə/) can be observed in the same period in Westerlauwers Frisian and in the dialects of North Holland. He dates the initial and final stages roughly to 1450 and 1700. He also suggests that North Holland was the area which initiated the raising (p. 112), whence it was passed on to Frisian. The process of raising may have started well before the year 1450. *Schere* ‘host’ (MoDu. *schara*, *schaar*) is first attested in a North

Hollandish text from 1347. If the word *sthereman* in a late thirteenth-century manuscript from Egmond can be emended to *s<c>hereman* and continues \**schareman* ‘member of the host’ (de Vaan 2012b), the raising may have started already in the thirteenth century.

Once the *ee*-words are disregarded, the possible evidence for frisianisms is confined to words (also) attested with *ie* and not restricted to North Holland. The reflex *ie* implies that these words already had a long mid vowel /e:/ when the vowel resulting from \*æ and lengthened \**a* was still a low vowel /a:/ or /æ:/. The evidence was collected from Schönfeld & van Loey 1970, §80, de Vaan 2010, and Versloot 2012.

1. *deek* and *veek* ‘washed-up rubbish, driftwood’ < \**pæka-* ‘cover’. A high vowel *ie* is only attested in part of the North Hollandish material. Boekenoogen (2004: 87) regards *diek* as the contemporary dialectal word, whereas *deeck* is found in earlier documents and may be used in contemporary speech on the basis of those written sources. Boekenoogen claims that the same division between older *ee* and modern *ie* exists for the verb *afdeeken* ‘to remove the washed-up rubbish from the sides of the dike’. Southern South Holland has *deek* in a number of dialects, whereas in Utrecht and Overijssel, we find the expected Central Dutch variants *daak*, *daok* (Opprel 1937). An alternative form *veek* /ve:k/ – with exactly the same meaning as *deek* – occurs in southern South Holland and in Zealand (Opprel 1937, WZD 1042). In Flanders, *veek* is restricted to Zeeuws Flanders (WVD ‘Waterhuishouding’, p. 526).

The word \**pæka-* also underlies the Modern West Frisian toponyms *De Tike*, *Tiekelân* (Versloot 2001c), East Frisian *teek*, North Frisian *Föhr tiak*, Amrum *siak*, and Sylt *teeki* ‘washed-up seaweed’. It seems likely that Opprel 1937 and WNT (s.v. *veek(e)*, an entry written in 1952) are correct in assuming that WGm. \**pæka-* had a variant \**fæka-*, and that both variants are reflected in coastal Dutch. Parallel cases of a \**b*-/\**f*-vacillation within Germanic are ON *bili* vs. ON *fili* ‘board’, MoHG *finster* vs. MHG *dimster* ‘dark’ (both etyma with PGm. \**b*-), and ON *fél* vs. *bél* ‘file’ (with \**f*-). Versloot (2001c: 5–6) concludes that Old Frisian \**b*- in Holland had remained voiceless at the time of the language shift, as this would make its interchange with \**f*- easier to understand. The Hollandish form has the usual Dutch reflex *d*- from \**b*-, and did not share the Frisian development to *t*-.

2. *lieke* ‘leech’ < \**lækja-* (OFri. *lētza* ‘physician’, OE *læce* ‘physician; leech’, MoE *leech*, OS *läki*, OHG *lähhi* ‘physician; ring-finger’, ODan. *laeki*, Goth. *lēkeis* ‘physician’). Middle Dutch forms with a raised vowel are *lieken* beside *leken* ‘leeches’ (*Lancfranck*, Amsterdam ms., ca. 1460), *lieken* (Yperman, *Medicina*, Flanders, 1351), which occur beside *lake* ‘leech’ (Boëthius-translation, 1485; SE-Flemish). Kiliaan mentions as a Flemish word *lijcklaecke*, literally ‘body-leech’. In modern dialects, the word only survives in Flanders (see van Sterkenburg 1975: 224–7)

with dialect map). The data for ‘leech’ in WVD show that *laken*, *lijk-laken* is found all over West Flanders, whereas *leek* is a form of southeastern East Flanders and of westernmost South Brabant (WBD). The *ee* of this form looks like a pre-stage of the *ie* in MDu. *lieke*. The forms *leek* and MDu. *lieke* have been explained as an *i*-mutated form which entered Flanders from Brabant (thus Heeroma 1942b: 69), where indeed *leek* is attested in the southwestern corner. In that case, the forms *lake*, *laecke*, modern *laken*, must represent a coastal Dutch form with regular absence of *i*-mutation of ODU. \**a*:.

3. Coastal Dutch *mede* (*meet*) ‘mowing field, mead’ < \**mædwō* (OFri. *mēde*, MoWF *miede*, OE *mēd*) is a derivative of ‘to mow’ (Kroonen 2013: 367). Standard Dutch has *made*, *maat*. In Old Dutch (cf. ONW and Quak 2003: 297–8), we find *made* next to *mede* in toponyms from South and North Holland but only *mede*, *meeth* in Zealand and Flanders. Examples from the latter region include: 1162 *Langenmeeth* (near Veurne, WFla.), 1130 *Avinemēd* (Oudenburg), 1171 *Woburgmet* (Oudenburg), 1177–87 *Comet* (near Cadzand); compare also the name of the region *Meetjesland* in Northeast Flanders. The only Flemish name to show both vowel variants is 1041 *Matkerke*, 1089 *Madkerca*, ca. 1175 *Metcherche*, 1193 *Metkerka* ‘Meetkerke’ (near Bruges). In the simplex ‘meadow’, the Early Middle Dutch texts similarly show a preponderance of *made* in Holland, whereas *mede*, *meet* are more frequent in Flanders than *made*, *maet*. In toponyms (Rentenaar 1972, van Loon 2014: 93), the thirteenth-century attestations of this word as mapped by Mooijaart (1992: 114) show 68% of *e(e)-spellings* in West Flanders, as against 33% in East Flanders, 20% at the count’s court in Holland, and zero in the remainder of Holland.

The frequent attestation with /*e*:/ in West Flanders excludes the possibility that *meed*, *mede* represents a purely Hollandish raising of earlier /*a*:/, an option left open by Versloot (2012: 115) because of the absence of variants with <*ie*> in Holland. We do find <*ie*> in one toponym, however: in Cadzand in Zeeuws Flanders, the toponym ‘House-mead’ is attested in 1189 as *Husmiet*, *Hūsmiet* and *Husmet* (ONW).

4. Middle Dutch *mielen* ‘to paint’ < \**mālōjan-* (OFri. *mēlia*, MoWF *miel(j)e*, OHG *mālōn*, *mālēn* ‘to paint’, OIC. *mála*, denominative to \**māla-* ‘spot, mark’; but Gothic *meljan* ‘to write’) versus Early Modern Dutch *malen*. Middle Dutch *ie*-forms occur in Lodewijk van Velthem’s *Arturs Doet* in the Lancelot Compilation (ms. 1325–30, Flemish with Brabantish influence), viz. pret. *mielde* (line 2710), ptc. *gemielte* ‘written, painted’ (line 2637, 2726),<sup>172</sup> in the Amsterdam ms. of Hein van Aken’s *Die Rose* (ca. 1315), viz. *gemielte* ‘depicted’

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<sup>172</sup>. <https://galerij.kb.nl/kb.html#/nl/lancelot/>.

(line 999, not in rhyme),<sup>173</sup> in the Leiden fragment of *Huge van Bordeeus* (first half of 15th century, Flemish; line 209),<sup>174</sup> viz. *gemielt* ‘painted’, and in the prologue of *Spieghel der menscheliker behoudenesse* (ca. 1400–1420, Flemish),<sup>175</sup> viz. *ghemielt* ‘painted’. A noun *mielre* ‘painter’ occurs in Jacob van Maerlant’s *Spiegel Historiael*. The *aa*-form *malen* is attested in East Flanders (*Enaamse Codex*, 1290) and its rounded variant *molen* in Limburg (*Glossarium Bernense*, 1240). The absence of *i*-mutation in Limburgian proves that we must reconstruct an Old Dutch present stem in *\*-ōn* or *\*-ēn* rather than *\*-jan*, since the latter would induce *i*-mutation in eastern Dutch. Hence, the suggestion by Heeroma (1942b: 69) that *mielen* may represent a Brabantish form with *i*-mutation must be dismissed. Middle Dutch and Early Modern Dutch literary texts from Brabant and Holland have *ma(e)len*. After 1700, the verb slowly disappears from written usage (cf. WNT s.v. *malen III*).

5. Coastal Dutch *triem(e)* ‘crossbar of a chair; shaft of a wheelbarrow’ < WGm. *\*træman-* or *þræman-* (MoWF *triem*, *trym*, *trim* ‘rung of a ladder’). Cognate forms are MDu. *tram* ‘wooden beam’, Modern Limburgian *tram* ‘id.’, West Flemish *traam*, PL. *tramen*, all from WGm. *\*tramu-*, and East Flemish *treem*, PL. *tremen*, Limburgian /tre:m/ ‘beam’ < *\*trami*, the plural of *\*tramu-*. For a discussion of the forms and their reconstruction, see de Vaan 2010. The *ie*-forms occur from North Holland down to East Flanders and point to an early frisianism. Initial *t*- of *triem* might reflect the Frisian development of *\*þ-* but could also be due to analogy with Franconian *\*tramu-*.
6. Standard Dutch *wiel*, also *weel* ‘pool (after a dike has collapsed), eddy’ < *\*wæla-* (OFri. *wēl*, MoWF *wiel*, OE *wæl*), beside *waal*. An Old Dutch instance may be *Vual*, PL. *Vuala* ‘abyss’ in the Wachtendonck Psalter. The PN *Gerardus de Wildreht* (1187, near Dordrecht, SH) is interpreted by ONW as containing a place-name ‘Wieldrecht’, with a first member *\*wiel* ‘pool’. This is possible but of course uncertain. Clearer attestations occur after 1200, when we find *wiel* in Holland (Arkel, 1284) and West Flanders (Bruges, 1285; if the surname *vanden wiele* means ‘From the Pool’) and twice *wile* (DAT.SG.) in Oudenaerde (East Flanders). The ACC.SG. *wiele* occurs in the Life of St. Christine (East Brabant, 1276–1300), which is somewhat remarkable because of the eastern provenance of this text. In fact, throughout Late Middle Dutch the word *wiel* is found in texts from Brabant, and Kiljaan (1599) also uses *wiel* as a translation of the “antiquated Hollandish” word *wael/wa:l/*. WNT (s.v. *waal I*) probably correctly

<sup>173</sup> [http://www.dbln.org/tekst/aken002ever01\\_01/aken002ever01\\_01\\_0008.php](http://www.dbln.org/tekst/aken002ever01_01/aken002ever01_01_0008.php).

<sup>174</sup> Text: Verdam 1898. Background: Lens 2004.

<sup>175</sup> [http://www.dbln.org/tekst/\\_spi003ldan01\\_01/\\_spi003ldan01\\_01\\_0001.php](http://www.dbln.org/tekst/_spi003ldan01_01/_spi003ldan01_01_0001.php)

assumes that *wiel* was originally restricted to coastal Dutch and gradually replaced *waal* in the inland dialects. Judging from the thirteenth-century material, this process had already started in Late Old Dutch. Still, the *aa*-forms were not completely ousted from the coastal area. *Wael*, DAT.SG. *wale*, also a NOM.SG. *wale*, is attested in the thirteenth century in Flanders, Zealand and South Holland, and it remains frequent throughout Middle Dutch and Early Modern Dutch in all (western) dialects. *Waleput* ‘eddy’ retains *aa* in modern West Flemish. De Bo (1892) furthermore cites *wèèle* /wɛ:lə/ ‘sea gully’, but seems to regard *wiel* as a non-Flemish, Brabantish word.

The interpretation of the *ee*-forms is not straightforward. *Weel* is the usual form in North Holland from the sixteenth century (Boekenoogen 2004), where it can also mean ‘little bridge across a gap in the dike’. For these dialects, a development of *waal* > *weel* with the frequent North Hollandish transition of *aa* to *ee* is quite possible. Zealandish *weeèle*, *wèèle*, *wieël* ‘pool after a dike collapsed’ (attested in eastern Zeeuws Flanders and Waasland) and West Flemish *wèèle* cannot reflect MDu. *waal(e)*. Thus, the situation is similar to *veek*, *deek*, with Flanders retaining *ee*-vocalism whereas other dialects have *ie*.

The village of Oosterweel near Antwerp is attested as *Otserwele* (1210 copy middle 14th c.), *Oucerwela* (1225) and in the surname *van outserweele* (Antwerp, 1248–71). Quite possibly, the eight instances of *van den wele* in the same Antwerp Obituary refer to the same village. The word has also survived in surnames derived from toponyms. Early attestations are *Boudens van den Weele* = *B. van den Wele* (1324, Antwerp); *Gillesse van den Wiele* (1373, Pittem, WFla.); *Heindric vanden Wiele* (1460, Middelburg), cf. Debrabandere 2003: 1321.

The vowels of the surnames by and large confirm the evidence from the appellatives. We find *ie* from Holland to Flanders, but also further inland in North Brabant: *Aandewiel* (Katwijk, South Holland), *Aan de Wiel* (Alblasserwaard), *Verwiel* (central North Brabant), *van de Wiel* (*ibidem*), *van de Wiele* (East Flanders), *van der Wiel* (Biesbosch, Noordwijk), *van der Wielen* (eastern NBrab., also elsewhere). The vowel *ee* appears mainly in southern South Holland and in Zealand: *Verweel* (Voorne-Putten), *van der Weele* (Beveland, Schouwen-Duiveland), *van der Weel* (Schouwen-Duiveland), *van Weele* (Beveland), *Overweel* (Goeree-Overflakkee), *Westerweel(e)* (Zealand). Finally, *aa* is more prominent in southern South Holland, though it is found elsewhere too: *van der Waal* (*passim*, but especially in southern South Holland), *Verwaal* (southeastern South Holland). Possibly, part of the name bearers of the last two names were named after the river *Waal*.

7. Western Dutch *Ee* ‘water’ < WGm. \**axwō-* has apparently merged with the other frisianisms containing PFri. \**ē*. In inland Dutch, the NOM.ACC.SG. became \**aha* (cf. Braune & Reiffenstein 2004 §207) whence ODu. *ā* in *ā-lende* ‘island’ (WPs.), MoDu. *Aa* in several river names. The raised reflex is attested

down to West Flanders, cf. *Zierikzee* (*Siricasha* 1156 copy ca. 1222, *Sirixe* 1233, *Zierikshe* 1250), *Hiddeneze* ‘Hidden’s Ee’ (1167), and many others. Van Durme (2011: 259–71) offers a collection of fifty medieval toponyms in *ee* ‘water’ from Zeeuw Flanders and East Flanders. The vowel was raised further to /iə/ and /i(:)/ in North Holland, as in the toponyms *Die < d' Ie* = MoDu. *het IJ*, *Krommenie* (1276 *Crommenye*, 1292 *Crommene*, *Crommenye*, 1317 *Crommenie*, 1480 *Crommenee*), *Edam* (1357 *Edam*, 1393 *Yedamme*), and *Middelie* (1277 *Middela*, 1342 *Middelee*, 1393 *Middelye*). Whereas the shift *ee* > *ie* may be part of the general raising in (northern) Holland and may have been contemporary with the raising of *aa* to *ee* in North Holland, the input stage *ee* ‘water’ itself must reflect a frisianism.

The following words turn about to be irrelevant to our question:

8. *gier* ‘manure’ (North-Hollandish *ier*) versus Middle Low German *gare* ‘manuring’ (TNZN Map 1.7). See § 9.4 on this noun and its Proto-Frisian origin. As was established there, Hollandish *gier*, *ier* does not go back to Old Frisian \*jēra with a long vowel, but to \*jerō with a short stressed vowel. This vowel was lengthened in Hollandish before *r*, yielding *ee* and then *ie*.
9. *schriel* ‘lean’ versus *schraal* ‘scanty, thin, frugal’ < \*skræxa/ila-? (thus EWN s.v. *schraal*; compare MoWF *skriel*; further to MDu., MLG *schrā* ‘thin, lean’, OIc. *skrá* ‘piece of dry skin or parchment, scroll’ < \*skræxa-). The standard language has adopted both words but with semantic differentiation. In written Dutch, *schriel* is first attested in 1810 in Francq van Berkhey’s natural history of Holland, and it seems to be a Hollandish word. The late attestation, however, renders the antiquity of the word less certain. For instance, Boekenoogen mentions beside *schriel* ‘stingy; meagre’ also *skriebel*, *schrieuwel* ‘small, thin person’; thus, it cannot be excluded that *schriel* represents the secondary development of a word that has nothing to do with *schraal*.
10. The evidence of *wetering* ‘watercourse’ is inconclusive. From ODU. \*wataringō- F., we find reflexes with stressed *a* and stressed *e* in Dutch. There are two Old Dutch forms in *e*, viz. *wetteringa* in a document from Utrecht of 1155, in which it is said of the inhabitants of Polsbroek (between Utrecht and Gouda) that in their language they call a ‘watercourse’ *wetteringa*. In another document of 1159, the bishop of Utrecht grants the people of *Thurslac* (‘Doorschlag’, near Beesd between Utrecht and Den Bosch) the right to make an *aquae ductum* ‘watercourse’, which *apud nos* ‘among us’ is called *weteringe*. In Early Middle Dutch, there are four attestations of *weteringhe* from Haastrecht (1289), not far from Polsbroek in South Holland, and one of 1298 from Utrecht. In the same period, there are 47 instances of *wateringhe* from West Holland, including Dordrecht, from Bergen op Zoom and from West Flanders. In later Dutch,

*wetering* is firstly an eastern Dutch word, with expected secondary *i*-mutation. It also survives as a hydraulic term in the west, but more so in South Holland than in North Holland; Boekenoogen (2004) gives several examples with *wa-* but none with *we-* for North Holland. For toponyms, compare *Wateringen* near The Hague versus *Rijpwetering* northeast of Leiden. Obviously, the *a* in *watering* could be restored at any moment on the model of the simplex *water*. Hence, the absence of *wetering* does not necessarily imply the absence of the word in the oldest layers of western Dutch. Still, it seems at least possible that the five twelfth-century instances of *wet(t)eringe* reflect the language of Utrecht, for which we expect *i*-mutation. The original term in all of coastal Dutch may have been *wateringe*. Some support comes from the verb *wateren* ‘to drain (into)’, a verb which may be regarded as the derivational basis for *wa/eteringe*. It is found with *a* in Early Middle Dutch texts from West Flanders, Holland and Utrecht, but as *weteren* in two documents from Sint Michielsgestel (near Den Bosch) and one from Arkel, on the border of Holland and Guelders.

11. *mazelen* ‘measle(s)’ (OS and OHG *masala* ‘blood blister’, MoWF *hūnemiezel* ‘swelling on the finger’). This word is regarded as a frisianism in North Hollandish by Versloot (2012: 114). His judgement is based on one attestation of *miezele* in Pannekeet’s dictionary (1984) of North Hollandish, who says that it is an antiquated form of *mazelen*. Boekenoogen 2004, however, does not mention *miezelen* ‘measles’. The source word is identified as MoWF *miezels* ‘sickly condition’ by Versloot. A Frisian origin for NHol. *miezele* is therefore possible but uncertain. The oldest expressions given by WFT are *yn ’e miezel sitte, wēze* ‘to be ailing, be sick’, with a singular *miezel*. EWN reconstructs WGm. \**masalō-*, but Kroonen (2013: 366) reconstructs PGm. \**mēslō-* f. ‘growth’ on the strength of the comparison with \**mēsōn-* ‘spot, scar’. Within Frisian, *miezels* may belong to a set of words with pan-Frisian lengthening of \**a* before fricative plus resonant, as in MoWF *fiem* ‘fathom’ < \**faðm-* and *biezem* ‘broom’ < \**besm-* (Versloot, pers.com.).

## Interpretation

For *mede*, *mielen* and *wiel*, we have medieval evidence for the raising to *ie* in Flanders; for *triem*, such evidence is absent, though modern dialects make it very likely that *triem(e)* was present in East Flanders in the Middle Dutch period. For MDu. *lieke*, *leke*, SW-Brabantish *leek* ‘leech’, a Brabantish origin of the *i*-mutated vowel cannot be excluded. The inherited *aa*-vowels are not normally raised in Flanders, and the medieval occurrences of these *ie*-words do not fit in the general development of

the Flemish vowel system. Either they are relic words which escaped the general development of \*/æ:/, or they were borrowed from a different variety.

If they are relic words, they must have been raised to /e:/ in the Old Dutch period, and were further diphthongized to /i.ə/ in large parts of coastal Dutch (*triem, wiel*), or at least in Flemish (*lieke, mielen*, sporadically *miede*). In view of the general retention of /æ:/ (in Zealand) or its lowering to /a:/ in the bulk of the lexicon, these words were then petrified with a high vowel in names (viz. *wiel* and *mede*) and in a few other, isolated lexemes (*triem, lieke, mielen*) without any apparent phonetic conditioning. Afterwards, \*ai was raised to /e:(ə)/, and further raised to /i.ə/ in late medieval Hollandish (see §20) and, between ca. 1500 and 1800, under Brabantish influence, in East Flanders (Taeldeman 1985: 193).

In de Vaan 2010, it was suggested that coastal Dutch words such as *mielen* and *triem* are Frisian words which remained in use when the speakers of coastal dialects shifted from Proto-Frisian to Franconian. As for the semantics, the assumption of local borrowing from the substrate language is unproblematic for *deek, mede, wiel* and *Ee*, which refer to local toponymy. *Lieke* is an insect, for which borrowing or replacement by a similar insect name is a frequent phenomenon. Only *mielen* ‘to paint’ and *triem* ‘beam’ belong to the more general vocabulary, and their borrowing would be more conspicuous. Note, though, that *triem* has various local technical uses, and may have referred to a certain technique (of making chairs, wagons, houses) that was preserved when the language shifted.

The raising to *ie* in *deek* and *Ee* is confined to North Holland, with *Ee* showing early instances, but *deek* only modern ones. The co-occurrence of *deek* (next to *daak*), *weel* (next to *waal*), and *mede* (next to *made*) in Zealand and South Holland, can either continue a Late Old Dutch mid vowel /æ:/ or be due to a more recent raising of /a:/ to /e:/.



## Unrounding of \* $\bar{u}$ , \* $\bar{o}$ , \* $\ddot{a}\ddot{u}$ , and \* $iu$

In a number of words, western dialects show an unrounded reflex of an original back vowel or diphthong which was followed by an *i*-mutation factor. Compared to the unrounding of \* $\bar{u}$ , which is limited to two well-defined categories (see § 15.2), the coastal Dutch unrounding of long back vowels and diphthongs has a more sporadic character. Schönfeld & van Loey (1970: 46–7) regard most of the relevant forms as loanwords from Old Frisian, or, in the case of ‘heel’, as Ingvaemonic. Other scholars, such as Schrijver (1999: 19 and 2014), regard *i*-mutation of long back vowels plus subsequent unrounding as an original characteristic of coastal Dutch, most traces of which were ousted by the later franconization. In this section, I will discuss the possible evidence for unrounding in words which had or could have had \* $\bar{u}$ , \* $\bar{o}$ , \* $\ddot{a}\ddot{u}$ , or \* $iu$  in Old Franconian.

### 19.1 Unrounding of \* $\bar{u}$

A few words have an unrounded reflex of *i*-mutated \* $\bar{u}$ .<sup>176</sup> In order to correctly judge the evidence, we must take into account the following changes. Firstly, \* $\bar{u}$  was fronted to \* $\bar{y}$  in Flemish in the Old Dutch period. Secondly, we find an (apparently recent) unrounding of MDu. /y:/ to /i:/ in parts of West Flemish and Zealandish if the vowel was followed by a labial. De Bo (1892: 290) mentions *drijvelaar* for *druivelaar* ‘vine’, *hief* for *huig* ‘uvula’ (via \**huuf*), and (*h*)*ieveren* for *huiveren* ‘to shiver’. To this we may add Zealandish *ival* ‘poverty, discomfort, illness’, *ivallig* ‘disgusting, weak; nice’, as against West Flemish *upal* and *uvallig* (see § 13.1 for the etymology \**unfala-*). Probably, this unrounding is a hypercorrect reaction to the frequent Flemish and Zealandish labialization of /i:/ to /y:/ between labials, as in *puupe* ‘pipe’, *bluuve* ‘to stay, Du. *blijven*’, *vuuf* ‘five’, *wuuf* ‘wife’.

1. The Early Middle Dutch surname *duninc* also occurs as *dininc* in Bruges. VMNW mentions *Riquid Dininc* (1268, 1272), *Riquid Dining* (1267, 1293), *Riquid Dunig* (1271) and *Riquid Donig* (1293), which either refer to the same person or to father and son. Another person is *Jan Duningh*, the late husband

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<sup>176</sup> See, among others, Heeroma 1952, Weijnen 1965: 387a, Miedema 1988, Schrijver 1999: 19.

of *Heysa* (1280). This surname was derived from the Old Dutch given name *Duno*. The surname is also found as *Dunning* (1166, 1205) and, much later, as *Duyninck* (1626).<sup>177</sup> The latter name confirms the length of original \*ū. A preform \*dūninga-, if it existed in Old Franconian, would have given secondary *i*-mutation of the stressed vowel. In that case, *dininc* might indeed be due to unrounding of /y:/ . But it seems very doubtful that the formation was so old as to go back to the franconisation of Flanders, i.e., to the ninth century at the very latest. The name occurs only a few times, and *-ing* was a productive derivative suffix in surnames. Moreover, VMNW offers an alternative explanation of the name *dininc* s.v. *dieninc*, where it is held that *Riquid Dininc* contains a derivative of the verb *dienen* ‘to serve’. Since this verb is mostly spelled with <ie> rather than single <i> in Flanders, this second hypothesis is less attractive. In view of the alternation between *Riquid Dininc*, *Dunig* and *Jan Duningh* in Bruges, the explanation from a recent unrounding is to be preferred.

2. MDu. *hide* ‘fishing port’ < \*xūbjō- (OE hȳð f. ‘landing-place, port’, MoE *Hythe*, *Greenhithe* in Kent, and other toponyms; Mansion 1933). The noun cannot be a derivative of the verb ‘to hide’ (contra Mansion and Debrabandere et al. 2010: 133) because of the different dental consonants in the two stems (\*d in *hide* but \*þ in *hithe*). Of course, at a deeper level both words could be Verner variants of the same root, that is, PGm. \*xūbjō- from barytone PIE \*kúHt-iH- versus \*xūdjan from oxytone PIE \*kuHt-éje-. But there is no good Proto-Indo-European candidate for the root, and the meaning ‘port’ does not necessarily derive from ‘shelter’. In fact, the Old English word *hȳð* originally meant a ‘landing-place’ where ships were drawn onto dry land, as opposed to a port where ships could stay in water (Ellmers 1984: 137). It is therefore conceivable that \*xūbjō- does not derive from ‘to hide’ but from \*xunbjō-, a variant beside OE *hūð* ‘booty’ (\*xunþō-) and Gothic \*hunþs ‘captivity’ (\*xunþi-), all to the verb \*xinþan ‘to reach for, catch’. In that case, \*xunbjō- ‘landing-place’ may originally have meant ‘transfer, place for transshipment’.

Schönenfeld & van Loey (1970: 32), Heeroma (1952) and others have recognized the element (*h*)*ide* in a number of coastal toponyms. On the Flemish coast there are *le Hyde* (near Dunkirk, 1318), *Koksijde* (1270 *Coxhyde*, 1295 *Koxide*),<sup>178</sup> *Raversijde* (1295 *Wilravinside*, 1419 *Walravens yde*), in Zealand *Coxijde* (1252, Zeeuws Flanders), *Coude Hide* (1227, 1239), *Palvoetzide* (1351, Schouwen), and in South Holland *die Hiide* near Zwijndrecht (1331). The Old Frisian product of unrounding \*ē is possibly attested in Terschelling *Hee*

<sup>177</sup> Debrabandere 2003: 412.

<sup>178</sup> On *Koksijde* see Lehouck 2010.

(15th century *Heed*, 1450 *Hee*) if from \**hēpe* (van Berkel & Samplonius 2006). Whether *Yde*, attested in Drente in 1323 and as *Hye*, *Hyde* in 1560, belongs here too, as Mansion assumes, is unclear to me.<sup>179</sup> If the Low German toponymical suffix *hude* belongs here, it goes back to a slightly different formation, viz. without *i*-mutation.

3. *hiden* ‘to hide’ < WGm. \**xūdjan-* (OE *hýdan*, MoE *hide*) occurs twice in Middle Dutch, viz. *gehidet* ‘hidden’ and *te hydene* ‘to hide’. The usual Middle Dutch form is *huden*, *huyden*, Early Modern Dutch *huyen*. The verb mainly occurs in sources from Flanders, Holland and the northeast. Unrounded *hydene* ‘to bring into safety’ is attested in an account from Oostende (1403–04; Debrabandere et al. 2010: 133). The participle *gehidet* ‘hidden’ rhymes with *lidet* ‘goes’ (MoDu. *lijdt*) in the Reinaert ms. E (1276–1300; the ms. has many Limburgisms but the language is Flemish in origin).
4. *kies* ‘molar’ < \**kūs(j)ō-* (MLG *kuse*, OFri. *kēse*, MoWF *kies* ‘molar’, MLG *kuse*). The earliest attestations are *kiesetand* ‘molar tooth’ (1440; MNW) and *kies* (ca. 1460–70; EWN). Kiliaan (1599) calls unrounded *keese*, *kiese* Saxon, Frisian, and Hollandish, as against rounded *kuyse*, *kuse*, which would be Saxon. In modern Dutch, according to TNZN Map 4.1, *kies* is found in most dialects of Holland, Utrecht, and Gelderland, whereas northeastern dialects have the rounded vowel: *koes* or *koeze* in most of Groningen, Drente and Overijssel (in agreement with MLG *kuse*), *kuus* or *kuze* in northwestern Groningen and a small northwestern part of Overijssel. Probably the word *kuus* ‘wooden club or stamper used for making pig’s fodder out of potatoes’ found in East Limburg (WLD I, 12: 34–5) represents the same word. In Zealand, unapocopated *kieze* competes with compounds such as *dubbele tand*, which (together with other words such as *baktand*) are the only native forms for ‘molar’ in all southern Dutch dialects.

The Frisian form *kēse* and the *ȳ*-vocalism in the northeast require a pre-form with *i*-mutation such as \**kūsjō(n)-*, but most of Low Saxon presupposes \**kūsō(n)-*. It is conceivable that both forms derived from a single original paradigm. One option is to posit an *ī/jō*-stem, with NOM.SG. \**kūsī* > \**kūsi* > \**kūs* with *i*-apocope (cf. OS *brūd* ‘bride’ < \**brūþi-* for the apocope) beside \**kūsjō-* in the oblique cases. Another alternative would be to posit an *i*-stem \**kūsi-* leading to a singular without, and a plural with, *i*-mutation. Early MoDu. *kuys(e)* ‘cudgel’ might be the same word as unmutated MLG *kuse*.

<sup>179</sup>. The form *hie* which is glossed with ‘hamlet’ in WNT, and which is found only a few times in this meaning (e.g. in Kiliaan, who terms *hie* ‘hamlet’ an antiquated Zealandish form) is not the same word (contra Heeroma 1952), but represents a semantic specialisation from *huwe* = *hië* ‘housemate, family member’ (< WGm. \**xīwan-*), whence e.g. Dutch *huwen* ‘to marry’, G. *Heirat*.

5. *kijte* ‘kite, owl’ < \**kütjön-* (OE *cýta*). De Bo (1892: 150) interprets West Flemish *boschkijte* and *duinekijte* as having a second member *kijte* ‘owl’. He compares Kiliaan’s *kijte* and *hadekite*,<sup>180</sup> both with the meaning ‘kite’ and both explicitly called Flemish by the lexicographer. English *kite* is interpreted as \**kütjön-* by the etymological dictionaries. Compare also German *Kauz* ‘owl’, MHG *küz(e)* m. from WGm. \**küta(n)-*. In view of the probable onomatopoeic nature of this word, it cannot be excluded that West Germanic had \**küt-* and \**kít-* as original variants (compare *kievit* ‘lapwing, peewit’).

### Evidence to be dismissed

6. MDu. *brine* ‘brine, pickle’ (1240, Limburg), *brine* (Yperman, WFla.), MoDu. *brijn*, Flemish *brijne*. In view of the spelling of Old English *brýne*, Dutch *brine* has been regarded as a case of unrounding of /y:/, but Limburgian /i:/ excludes this option. Hence, for Dutch we must reconstruct an etymon with WGm. \**ī*, unless the word as a whole was borrowed into eastern Dutch from coastal dialects before 1200. The etymology is unknown.
7. *Grese* ‘grit’ in a Ghent charter from 1288–1301 is interpreted by VMNW as an unrounded variant of *gruse*, MoDu. *gruis* ‘grit; twaddle’. The relevant passage reads *Vort van grese & van wercstene* ‘further of grit and of work stones’. Modern West Flemish does show unrounded front vowels in this word, viz. in *greis*, *grees* ‘grit’ (de Bo 1892). Yet in Late Middle Flemish ‘grit’ mainly has the shape *greys*, *groys*, *greus*, which points to the so-called Middle Dutch vowel *ui*<sub>2</sub>, on which see § 19.5 below. Many of the words with this vowel are French loanwords, and such is the case here: Old Wallonian *grosse* ‘pebble, slack’ explains the different Middle Dutch diphthongal outcomes. The Old French word was *grès* ‘sandstone, gritstone’, which may be the direct source of the Ghent form *grese*.
8. Early Middle Dutch once has *griweliken* (*LutgK*, WBrab., 1265–70) for StDu. *gruwelijc* ‘awful’, a derivative of *gruwel* ‘horror’ < \**gruwilō-* (MLG *grūwel*, MHG *griuwel*, *griul(e)*, MoWF *grouwel*, ON *grýla*). It is possible that *griweliken* shows the originally regular *i*-mutation of Brabantish, thus \**gruwi-* > /gryw-/ , with subsequent unrounding of /y/ to /i/. Unrounding of rounded front vowels was a regular phenomenon in South Brabantish around Brussels.
9. The single mentioning of ODu. *hurlant* ‘tenured land’ (thus twice in Werden charters, and once in Guelders) as *hyrland* in the so-called *Gros Brief* of the

<sup>180</sup>o. The origin of the first member *hade-* is unclear. It is tempting to connect the personal names in *Hade-* (*Hadebert*, *Hadewijch*), in which *Hade-* represents WGm. \**xabu-* ‘battle’. In the verb *haderen* ‘to quarrel’, the same stem must be present.

County of Flanders from 1187 (viz. in the *Brevia de Roya* from Bruges), is interpreted by van Loey (1980: 78) as a case of Flemish unrounding of /y:/.<sup>181</sup> After all, the verb *huren* ‘to hire’ < \*xūrjan- (OFri. *hēra*) was susceptible to *i*-mutation. Indeed, the vocalic grapheme <y> is quite rare in Old Dutch, and, when used, it usually stands for /i:/. In the *Gros Brief* itself (edition Verhulst & Gysseling 1962: 172), <y> is only used frequently in the name of the town of Ypres; otherwise, /i:/ usually appears as <i>. One must therefore ask why *hyrland*, if it had /i:/, was written with a different and rare grapheme. If, on the other hand, *hyrland* was intended to convey a front rounded /y:/ (as is the interpretation of, e.g., van Loon 2014: 214), it is striking that other words containing \**ü* in the *Gros Brief* are normally spelled with <u>: *gruth* ‘gruit’, *Dicasmuda* ‘Diksmuide’, *Duvenhof* ‘Duivenhof’, *Sclusa* ‘Sluis’, *Coudescura* ‘Koudeschure’. Thus, the grapheme <y> in *hyrland* is unexpected in any account.

10. *Mijzen*, a toponym in North Holland, see Boekenoogen 2004 s.v. *Mijsmaad*. Early attestations are Old Dutch *Misnen* (1063 copy early 12th c.), Early MDu. *mizen* (1293–94). As long as the etymology is unknown, the name cannot be used as evidence for unrounding. It appears that the word *mis-n-* was originally an appellative, since it is found denoting various places in North Holland, such as a plot of land below Assendelft (*mijsmeed* 16th c., *Miesmaedt* 1635, with the appellative *meed*, *maad* ‘meadow’), *Misnen* near Schermer, and *in de smaelmiesen* (1613) near Uitgeest. The *ie*-spellings denote the retention of the archaic [i:]-pronunciation of *ij*.

## 19.2 Unrounding of \**ō*

Some western forms have an unrounded reflex of WGm. \**ō* plus *i*-mutation (see van Loey 1970: 46–7, Schrijver 1999: 19).

1. MDu. *ondievelike* ‘improperly’ (Willem van Hildegaebersberch, Holland, ca. 1480), Early MoDu. *ondieft* ‘improper; rather; nice’. The latter adjective is a mainly North Hollandish word of the late sixteenth and the seventeenth centuries. It probably contains paragogic *t* and goes back to \**on-dief* ‘not proper’. These words must be compared with Flemish *ongedoeve* ‘rough, wild’ (15th c.), modern dialects *ongedoef* ‘noise, racket’, *gedoevig* ‘meek’ (de Bo 1892), and go back to \**dōb-* (Goth. *gadōb ist* ‘it is fitting’). Whereas the Flemish forms show no *i*-mutation, the Hollandish *ie*-vocalism presupposes just that. Since *i*-mutation is attested in Anglo-Frisian (OFri. *unedēve* ‘dreadful’,<sup>181</sup> OE *ungedēfē*), we can

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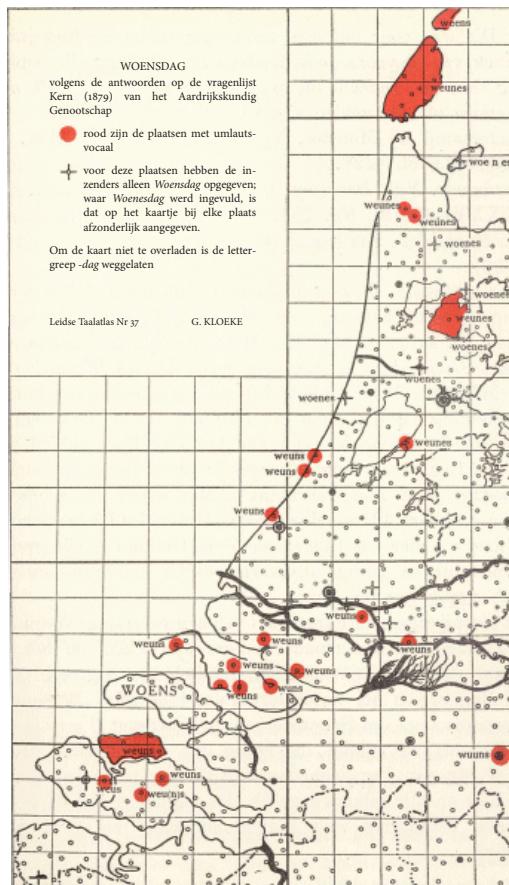
<sup>181</sup> See Buma 1951 for the Frisian word.

- posit Proto-Frisian \**gadēve* < \**gadōbi-* which was borrowed by the Franconian dialect of Holland. The form *ongedieve* ‘exceptional’ occurs in the Flemish ms.-Wissen of Maerlant’s *Troyen* in line 15917: *Got gheef hem rouwe onghedieve, die sceiden doet twe ghelieve* ‘God give him exceptional sadness, who makes two loved ones part’. The rhyme with *ghelieve* ‘loved ones’ assures that *onghedieve* was the original form. Verdam (1904: 295) suggests that line 13550 originally contained another instance of \**onghedieve* ‘unfitting’, rhyming with \**lieve* ‘love’. Although the ms. has *liefde* ‘love’ and *ongheriefde*, the usual Flemish word was *lieve*, which would have rhymed with \**onghedieve*. An *ee*-form *ondeeft* ‘a large quantity’ is found in the 15th-century Tübingen ms. of *Ons Heren Passie*, fol. 28v. (Verdam 1906: 197–9).
2. *griede* ‘grassland, land gained by accretion outside the dike’ appears in North Holland, viz. in Late MDu. *griedlant* ‘pasture’, MoDu. dial. *begrieden* ‘to grow over with grass’ (Ms. Kool, North Holland, ca. 1770; de Vaan 2013b: 130), *gried* ‘top layer of pasture’ (Boekenoogen 2004), Texel *griede* ‘land by accretion’. The *ie*-vocalism proves that the word was borrowed from the Old Frisian word *grēde* f. ‘grassland’, the regular cognate of MDu. *groede* f., MHG *gruot* ‘id.’ < WGm. \**grōþi-* ‘growth’.
  3. *hiel* ‘heel’ is probably the most famous of the coastal Dutch words with a possible Frisian origin. Proto-Germanic \**xanxila(n)-* > \**xāxila(n)-* has reflexes in North Germanic (ON *hæll* m., Far. *hælur* m.), in Anglo-Frisian (OE *hēla* m., OFri. *hēl-*, *heila* m., Wangerooge dial. *hil*), and in Swabian dialects of southern Germany (Gechingen *haile*), see Kroonen 2013: 209. In addition, a feminine \**xāxilō-* is reflected in OHG *hähila*, *hähala*, Swiss Visperterminen dialect *heelif* ‘kettle hook’. Hence, \**xanxila-* meant ‘little hook’, and was metaphorically applied to the heel (Kroonen 2011: 329) in many dialects, particularly in Anglo-Frisian. The earliest Dutch attestation is the surname *Hiele* (1217). The word is restricted in its modern geographic distribution, as shown by the map in TNZN 4.6. Very roughly, North and South Holland, Zealand, Flanders, and western Brabant have the etymon *hiel*, whereas the northeastern dialects, Guelders, Utrecht, northeastern Brabant and northern Limburg use *hak*. Southeastern dialects display the etymon *verzen* (MoHG *Ferse*). In the west, we find (*h*)*iele* in Zealand and Flanders, and (*h*)*iel* elsewhere. The *ee*-vocalism in central-southern Brabant (Brussels, Mechelen, Antwerp) is expected for StDu. *ie* (cf. Belemans/Goossens 2000: 154). This means that, if *hiele* was indeed a frisianism which entered inland Dutch from the west, it must have happened early enough to predate the change of ODu. \**eo*, \**ē* to *ie* in Flanders, since otherwise Brabant would not have /e:/-. Such an early date would match the exclusive use of the *hiel*-etymon in all of Flanders. Apparently, it was borrowed from Proto-Frisian \**hēla(n)-* in Flanders and thence spread eastwards.

4. *smieē* ‘smooth’. In § 12.2.3 above, we have seen that PGm. \**smanþa-*, \**smanþi-* ‘smooth, weak’ is reflected both without and with *i*-mutation in western Dutch. Heeroma (1968b) concluded that, in Early Middle Dutch, the coastal dialects knew both \**smiede* < \**smēde* and *smoede* < \**smōde*; similarly, both variants existed in northeastern Dutch (Gron. *smui*, *smuu*, etc.) and in Westphalian. The vowel of *smied-* shows the unrounding of \**ö* which is characteristic of Proto-Frisian.
5. *Swieten* from \**Swēten* was the Old Frisian name of a tributary of the Old Rhine, a little upstream from the later city of Leiden. The name contains the adjective \**swōti-* ‘sweet’ (<< \**swōtu-*), with *i*-mutation and unrounding as in Old Frisian *swēte*, MoWF *swiet*. For attestations of the place *Suetan* (9th copy 10th copy end of 11th c.) and of the stream *die Suete* (1296), *de Sweete* (1314), *Zwete* (1323), *Zwiet* (1341), see Blok 1959b. He suggests that ‘sweet’ referred to this being the first place with drinkable (non-silted) water when sailing upstreams from the mouth of the Rhine near Katwijk. The name of the stream was adopted by the first settlement after the clearance of the peat-bogs. When the settlement was later moved onto the earlier ‘wald’, the name became *Sotre-wold* (1205), now *Zoeterwoude*.
6. *Wenesdag* ‘Wednesday’. *Wenesdag* is an Early Middle Dutch hapax with unrounded vowel, whereas Modern Dutch has *woensdag*. The attested form is the genitive *wenesdages* (1260, Grauw in Zeeuws Flanders): *dies wenesdaghes na sainte mathis dach* ‘on the Wednesday after St. Matthew’s day’. The name of ‘Wodan’s Day’ in the Germanic languages reflects both \**Wōdanas* \**dag* and \**Wōdinas* \**dag*, and can therefore be found both with and without *i*-mutation (Pijnenburg 1980). Unmutated \**Wōdanas* is continued by MDu. *woensdach*, *woendesdach*, *wodensdach*, MLG *wōdens-*, *wōnesdach*, OFri. *wōnsdei*, OE *wōdnesdæi*, ON *ōðinsdagr*, whereas the effects of *i*-mutation in \**Wōdinas* are shown by MoE *Wednesday*, OFri. *wednesdei*, *wernsdei*. The co-occurrence of both variants within English and Frisian suggests that they coexisted within Proto-Anglo-Frisian. A similar alternation is also found in the simplex for the deity, which shows the three suffix variants \*-*ana-*, \*-*ina-* and \*-*una-*: OS *Wōdan*, OHG *Wuotan*, OE *Wōden*, OIc. *Óðinn* < \*-*ana-*; MoE *Wednesday*, OFri. *wednesdei* < \*-*ina-*; ON *Óðonn*, OSwe. *Óðun* < \*-*una-*.

Traditionally, the suffix alternation is compared with other suffix alternations such as \*-*i/a/ula-*, \**i/a/uga-*, and is regarded as secondary (see, e.g., Krahe & Meid 1969: 51, Schaffner 2001: 323). Yet the alternation in *l*-stems can also be explained on the basis of an inherited mobile *l*-stem paradigm with suffix ablaut, as shown by Kerhof (2012): PIE \**el-*, \**ol-*, \**-l-* would give PGm. \*-*il-*, \*-*al-*, \*-*ul-*, respectively, which were then thematized to become *a*-stems. Similarly, Kroonen (2011) has shown that Kluge’s gemination of

stops betrays the preservation of Proto-Indo-European ablaut patterns in the *n*-stems. Among other things, this requires us to reconstruct a large number of athematic *n*-stems in Pre-Germanic which had kept the inherited suffix alternation between PIE \*-ōn, \*-ēn, \*-on-, \*-en-, and \*-n-, as well as ablaut variants in the root. For 'Wodan', we may reconstruct a paradigm with NOM.SG. \*Wōþō, ACC.SG. \*Wōdénun, GEN.SG. \*Wōdnáz. The *e*-vocalism became \**i* in unstressed syllable and caused *i*-mutation. Note that a masculine *n*-stem \*wōðan- is attested in OHG \*wuoto 'berserk', OE wōða 'madman'. It is possible that the god \*Wōdá/én- was a secondary *n*-stem derived from the adjective \*wōða- 'enraged'.



Map 40. Front vowels in *woensdag* according to the 1879 questionnaire (map taken from Kloek 1936; front vowels given in red).

In a 1879 dialect enquiry, 'Wednesday' has a front rounded vowel *eu* in southern South Holland and Zealand and in traditional dialects along the Hollandish coast up to and including Texel, as well as in West Friesland (see Map 40). Kloek

1936 concludes that this distribution shows the effect of an Ingvaenic phase. The spread of /ø:/ in western Dutch is such that one may assume *Weunsdag* to have been the colloquial form in all of Holland and the islands of Zealand until fairly recently (see also *WZD*). Kloeke also notes *wuunsdag* in Tilburg and Den Bosch, which is harder to interpret. The modern distribution according to the *GTRP* database, given on Map 41, shows that *weunsdag* has now receded from many Hollandish dialects, but is still found in Zealand.

*Weunsdag* also occurs in northern and western East Flanders, and in the south-east of the province of Antwerp (viz. in Herentals, Itegem, Geel, Tongerlo, Tessenderlo, and Haacht).



Map 41. Front vowel *eu*, sometimes *uu* or *u*, in *woensdag* (*GTRP* database)

The distribution of the front vowel within Flanders is unique, compare Taeldeman 1979: 68–9. It might be suggested that the back vowel was fronted in East Flanders when intervocalic or prenasal *d* was lost, i.e.: \**wōdnesdag* > \**wōdensdag* > \**wōj-ensdag* > *wē:nsdag* (for the stages \**wōdnes-* > \**wōdns-* > \**wōdens-* > *woens-*, see Pijnenburg 1980: 152). That intervocalic \**d* > \**j* could have this effect on \**ō* is claimed by Taeldeman (1979: 68) for eastern Waasland and southern French Flanders. A concrete example is *broeden* ‘to breed’, found as *bruun* in French Flanders and *bruujen* in East Flanders.

The explanation of *weunsdag* from *d*-loss is in any case quite likely for the fronted tokens in the south of the province of Antwerp. This area coincides to a large extent with the Antwerp dialects that have /øy/ or /œy/ in *koe* ‘cow’ on Map 99 of *FAND* II/III, as opposed to the back diphthongs in the surrounding dialects. The accompanying comment of *FAND* (p. 218) explains that this region regularly has front diphthongs from \*ō before an original *d* which was syncopated (viz. in *bloeden* ‘to bleed’, *broedsel* ‘breeding’, *roede* ‘stick’, *voederen* ‘to feed’, *moeder* ‘animal mother’)<sup>182</sup> and before a hiatus-filling *j* (in *koeien* ‘cows’ and its singular). It is unclear whether the explanation of Flemish *weunsdag* by *d*-loss may also account for *wuunsdag* found in Tilburg and Den Bosch in 1879.

For Zealand and Holland, a similar explanation of *eu* in *weunsdag* is not available, as we have no parallels for it. The central and eastern dialects of Dutch unanimously point to an Old Dutch back vowel (cf. Schönfeld & van Loey 1970: 46), meaning that there was no Franconian *i*-mutated form which the speakers of coastal Dutch could adopt from inland Dutch (*pace* Pijnenburg 1980: 157). As argued above in § 17.3, it is conceivable that the preform \*wōdnesdag yielded \*wodnesdag by vowel shortening (cf. with metathesis *dn* > *nd* in *wondesdach*, Bruges 1271), whence \*wonesdag. Subsequently, western unconditioned fronting and open syllable lengthening would explain the result *weunsdag*.

This brings us back to the interpretation of the hapax *wenesdages*. Could it be a spelling error for \*wonesdaghes? That would be an unfalsifiable solution. Or was it pronounced as [wø:nɛsda:yøs], as suggested by Pijnenburg (1980: 154)? This would be an unattractive explanation, since rounded variants of /e(:)/ are usually indicated in writing in the thirteenth century, compare Early Middle Flemish *woch*, *woeghe* for *weg*, *weghe* ‘road’, *bewueghen* ‘to move’ and *woeke* ‘week’. I therefore prefer to regard *wenesdages* as a case of unrounding of the western Dutch vowel /ø:/ of *weunsdag*. In the vicinity of a labial consonant, a rounded vowel could sometimes be perceived as unrounded. The clearest cases of such unrounding are of the type *evel* > *evel* ‘evil’, discussed in § 15.2.3.

### Evidence to be dismissed

7. *kiem* ‘mould’ (on vinegar, wine, beer, etc.) is the North Hollandish and Groningen form for StDu. *kaam* ‘id.’. It is already given as *kiem* by Junius (1567) and by Kiliaan, who calls it Hollandish and Frisian. The other Dutch dialects have *kaam* or *kaan*, in line with the vowel of MHG *kām*, *kān(e)*, OIc. *kám* ‘filth’ and Early

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<sup>182</sup>. Since *bloeden*, *broeden* ‘to breed’ and *voederen* would have had *i*-mutation, only *koe*, *roede* and *moeder* independently prove the front vowel reflex.

MoE *coom* ‘soot, coal dust, saw-dust’, all of which regularly continue PGm. \*ǣ. The alternation in the word-final consonant is explained by Kroonen (2013: 284) as deriving from an original *mn*-stem \*kēman-, \*kēmn-, which led to \*kāma- beside \*kāna- in Old Dutch.

MoWF *kym*, *kim* and *kyn*, *kine* also show the *m/n*-alternation, but their high front vowel cannot regularly reflect unmutated WGm. \*ǣ before a nasal. Kroonen reconstructs a *ja*-stem \*kēmja- for English dialectal *keam*, *keans* ‘froth’, which presuppose OE \*kēme. The same preform \*kēmja- may explain MoWF *kym*, *kyn* from OFri. \*kēme.<sup>183</sup> The consistent <ie> of *kiem* in North Holland cannot be the regular Hollandish reflex of \*ǣ (which is MDu. *aa* > *ee*, cf. *maan*, *meen* ‘moon’; see Versloot 2012). In view of the restriction of *kiem* to North Holland, its Frisian origin seem likely. Other words in coastal Dutch *ie* from WGm. \*ǣ are discussed in §18 above.

### 19.3 Unrounding of \*ää

1. *opdiemen* is a dialectal form found in North Holland (Boekenoogen 2004) for StDu. *opdoemen* ‘to emerge, loom ahead’, a compound of *doemen* ‘to emerge as a mirage’ (cf. OS *dōmian*, OHG *toumen*). Modern Westerlauwers Frisian has *opdynje*, probably for \*op-dymje, which may continue OFri. \*dēman < \*däümjan-. Hence, *opdiemen* is a frisianism in North Holland. The /u:/ -vocalism of the standard language is unexpected because WGm. \*au (i.e. in \*daumjan-) usually becomes /o:/ – as indeed it does in MDu. *doom* ‘steam, vapour’ and *domen* ‘to steam, fume’. A comparable case is found in the co-occurrence of MoDu. *romer* and *roemer* ‘wine-glass’, of which the latter has become the Standard Dutch form of the twentieth century, whereas the former is the original vocalism. The noun originally means ‘Roman’, and is found in MDu. *romer(e)*, compare MoHG *Römer*. The vocalism of ‘Rome’ and ‘Roman’ in Dutch was originally that of \*au, as is confirmed by several modern dialects.
2. *stiemen* ‘to smoke, emanate warmth’ is found in North Holland dialects (Boekenoogen 2004), as are *stiem* ‘fume’ and *afstiemen* ‘to emanate’. They must be regarded as frisianisms, compare Modern Westerlauwers Frisian *stymje* from \*staumjan- (OE *stieman*, MDu. *stoomen*).
3. Dutch *teem* or *hoyteem* (thus Kiliaan) ‘instrument for making haycocks, consisting of a pole with ropes at the outer ends, dragged across the ground by

<sup>183</sup> OFri. ē was diphthongized to *ie* (*skiep*, *swiet*) and *ji* (*skjirre* ‘scissors’, *bjinne* ‘to scrub’) in Modern Westerlauwers Frisian, and sometimes further monophthongized to /i(:)/, as in *sykje* ‘to seek’ < \*sökjan-, *tsiis* ‘cheese’, *stymje* < \*staumjan- (Hoekstra 2001: 729, Versloot 2012: 114).

one or two horses, thus making rows of hay'. The corresponding verb is North Hollandish *tiemen* 'to make haycocks by having a horse drag a pole across the mown grass'. The word is absent from Flanders and Zealand. In fact, it is also absent from South Holland, with the exception of *tiemen* of *hooitiemen* once in Francq van Berkhey's *Natuurlijke Historie van Holland* (1811). Van Berkhey's *tiemen* is interpreted by Boekenoogen (2004) and WNT s.v. *tiemen* (1934) as a South Hollandish word, since the author was from South Holland; but he may have learnt the word further north. In any case, there are further instances of the verb in northeastern Dutch: Groningen *taimen*, *teimen*, Drente *teemen*, Overijssel *teeme* (for the noun), also *teemen*. In view of its general absence from southern Dutch, *teem* in Kiliaan is conspicuous: did he take it from a Frisian or a Saxon glossary? MoWF *tieme*, Schiermonnikoog /tɪəm/ 'hay-wiper' is a probable derivative of an OFri. verb \**tēma* 'to make haycocks by dragging a hay-wiper' (< WGm. \**taumjan-*). The Modern Westerlauwers Frisian verb *tiemje*, *tymje* 'id.' was derived secondarily from the noun *tieme* (thus Spenter 1968: 209). Löfstedt (1963–65: 309–13) has collected other Frisian forms which belong here, such as the Saterlandish verb *tîme*, Continental North Frisian *tîme*, and Insular North Frisian (Sylt) *temi*, which would also point to OFri. \**tēma*. I conclude that North Hollandish *tiemen* can easily be a borrowing from Frisian, but that this is less certain for northeastern Dutch *teemen*.

### Uncertain evidence

4. MoDu. *kreen* 'sensitive, touchy, averse, very precise, stingy' is mainly attested as *kreen* in South Holland and western Utrecht, but also sporadically in North Holland, Zealand (Zuid-Beveland *krienelen* 'to haggle'), North Brabant (Dongen *krien*), Overijssel and Groningen; see Buma 1960 for the meanings and the spread within the Netherlands. Buma regards *kreen* as a frisianism in the wide sense, encompassing the whole Dutch coast. The Old Frisian source word would have been \**krēne* 'plaintive' from WGm. \**krauni-*, a variant of \**krauna-* as continued by OHG *c(h)rōn* 'talkative'. Compare also the verbs MoE *to creen* 'to repine, fret', OFri. *krōnia* 'to complain', MDu. *crōnen* 'id.' and MoDu. *kreunen* 'to moan'. Although no Old Frisian simplex \**krēne* is attested, Buma points to the compounds North Frisian *siarkren* (on Amrum), *sirkräin* (in Wiedingharde) 'sensitive', *äim-kräim* 'too sensitive at the skin' (Bökingherarde), and Low German (Ostfriesland) *särkrenīg* 'sensitive', which in his view contain Old Frisian \**krēne*. Yet if western Dutch *kreen* is indeed a frisianism, it is striking that it rarely has *ie*-vocalism. Hollandish *kreen* could also continue a preform \**krinV-* or \**krain-*, so that its Frisian origin remains uncertain.

## Evidence to be dismissed

5. Dutch *baken* ‘sign, appearance, beacon’ is found as *boken* in eastern Early Middle Dutch (1240, Limburg) but usually with /a:/ in western dialects: *bakijnghelde* (DAT.SG) ‘beacon money’ (Dordrecht, 1284), MoDu. *baken*. Its *aa* deviates from the *oo*-vocalism which we would expect on the basis of the West Germanic etymology \*baukna- (OS *bōkan*, OHG *bouhan*, OFri. *bāken*, *bēken*, MoWF *beaken*, OE *bēacen*). The *aa*-vocalism must be due to borrowing from Westerlauwers Old Frisian *bāken*, Easterlauwers OFri. *bēken* (which is also the preform of the North Frisian forms, FÖ *biak/biik*, CNFri. *biik/biken*). Besides the noun, the verb \*bauknjan- ‘to signal’ yielded OE *bēcnan*, MoE *beckon*, OS *bōknian*, OHG *bouknen*. Though unattested in Old Frisian, its *i*-mutation explains the appearance of ē in Old Frisian *bēken*. In Holland, beside /a:/, we also find cases of /e:/: MDu. *beeken* ‘beacon’ (Amsterdam 1402–12), North Holland *beeken* ‘large fire’, *bekenen* ‘to light fires at certain festivals’ (Boekenoogen 2004 s.v. *bekenen*), also *bekem* and *bekemen* (Pannekeet 1984). North Hollandish /e:/ can represent the local, late medieval raising of /a:/ to /e:/ (Versloot 2012: 117) in a borrowing from Old Frisian *bāken*. Hence, *beeken* does not reflect an unrounded, *i*-mutated vowel.
6. MDu. *he(e)rnesse*, *-nisse*, *haernesse* ‘pasture; flock’ has been compared with OE *hērnes* ‘district’ from the verb *hēran* ‘to belong to’ (\**xaurjan-*). This explanation was last defended by Heeroma (1952: 261), who argues that the meaning ‘dominial land’ would have shifted in Flanders to ‘pasture’ and then to ‘flock’. The occasional spellings with *d*, such as *he(e)rdnesse*, would be due to folk etymology with *herde* ‘shepherd’. However, the spellings with *herd-* are hardly occasional (see the attestations in de Bo 1892 s.v. *hernesse*) and are among the first to appear, viz. in the fourteenth century (although ODU. *Vluodes Hernesse* in northern France already appears in 1097). Original *herd-* is confirmed by ODU. *herdnisse*, the word which the Dutch translator of the Leiden Willeram uses to translate OHG *corter* ‘herd’.
7. The Old Dutch toponym \**Kinelō/ēson* is attested with a second member twice in <e> and twice in <o>: *Kynloren* (2nd half of 8th copy 9th copy middle of 12th c., Fulda), *Kintloson* (idem), *Kinlesen* (855 copy early 10th c., Werden), *Kinleson* (10th c., Werden). The toponym refers to a place in West Friesland and may be analysed as a compound of \**kinō-* ‘creek’ and \**lausja-* ‘drainage, outlet’, hence ‘at the outlet of the creek’ (Quak 2003: 289; ONW s.v. *kina*). A derived adjective appears in *Chinnelosara gemarchi* ‘border area of the Chinnelosara’ (985 copy 1206–26 copies 14th–15th c.). If the etymology is correct, the spellings with <e> show Old Frisian /e:/ from *i*-mutation of \**au*, whereas <o> would show the expected Old Franconian /o:/ or /ø:/ from \**ää*. For the stem, compare Dutch *lozen*, G. *lösen*, OFri. *lēsa*, OS *lösian*, Goth. *lausjan* ‘to release’.

## 19.4 Unrounding of \*iu

PGm. \*eu was split into two allophones in West Germanic, viz. \*eo before low and back vowels in the next syllable and \*iu before high vowels. In northern and eastern Dutch, \*eo has usually resulted in a front unrounded vowel such as /i:/ or /e:/ whereas \*iu remained rounded, mostly giving /y:/. In Standard Dutch, we find <ie> /i/ for the former diphthong (StDu. *bieden* ‘to offer’, *diep* ‘deep’, *kiezen* ‘to choose’). The latter has yielded <ui> /œy/ except before r, where <uu> /y:/ results (*duister* ‘dark’, *Duits* ‘German’, but *sturen* ‘to steer’).

Southwestern and south-central Dutch only have a single reflex <ie> for both \*eo and \*iu. The extent of the area in which both diphthongs have merged differs per word. Since the main lines of development are sufficiently known,<sup>184</sup> I will only give a brief enumeration of the words with unrounded ie for WGM. \*iu in western and southern Dutch:

1. *briel*, toponym, originally ‘fenced area’, also ‘pasture’. This is a loanword from Old French *Broilo*, *Bruila*, *Bruilo* (> MoF *Bruille*, *Brueil*), see Debrabandere et al. 2010: 54. The ie-vocalism in western Dutch<sup>185</sup> versus uu-vocalism in the east suggests that the Romance word was borrowed as \*briul, which shared the change to /y:/ in Brabant and Limburg but became /iə/ in Flanders.<sup>186</sup>
2. *duur*, *dier* ‘expensive’, *dierbaar* ‘dear’ < WGM. \*diuri-. In Early Middle Dutch, i(e)-vocalism is found in all of Brabant and in West Limburg. Only Maastricht and Cleves/Gelders have *du(e)r(r)e*. In modern dialects, the adjective is found with /i/ or /i:/ in all of Flanders, South Brabant (also lowered to /e:/) and westernmost Limburg, in the province of Antwerp, Zealand, western North Brabant, the islands of South Holland and in some archaic coastal dialects of South and North Holland (ANKO II, Map 13). Map 42 indicates the southeastern isogloss between *dier* and *duur*, based on the GTRP database.<sup>187</sup>

<sup>184</sup>. See van der Meer 1927: 63, Gysseling 1992: 75–7, Schönfeld & van Loey 1970: 80–1, van Bree 1987: 110–3, Van Loey 1980: 61, Weijnen 1976: 219–20, 1991: 35, 46–8, Mooijaart 1992: 129–34, van Loon 2014: 125–9.

<sup>185</sup>. Though /y:/-vocalism is partly found in East Flanders, too, and, conversely, /i:/ in one Limburgian toponym: ODu. *Brike* ‘Brielen’ (1129–58), *Brielen* (1195) ‘Brielen’ (West Flanders), *Brike* (NW-Limburg, 1160), Early MDu. *ten ouden brielen* ‘Brielen’ (SHol., 1280), *brielen* (Ghent), versus ODu. *Brule* (SW-Limburg, 1151–1200), Early MDu. *van den brule* (Antwerp, 1248–71; Geraardsbergen, 1295; Grimbergen, 1294; but also in Petegem, and *uten brule* in Oudenaerde, in southern East Flanders), *brule* in SE-Limburg.

<sup>186</sup>. This seems a more straightforward solution than to assume two separate borrowings from French – one from OFr. *brule*, another from OFr. *briel* – pace van Berkel & Samplonius (2006: 76).

<sup>187</sup>. The hiatus in the centre of this area is caused by the regular unrounding of front rounded vowels in central Belgian Limburg, which makes it impossible to distinguish between the two types here.



Map 42. The border between the types *dier* (rectangles) and *duur* (circles) in Limburg

3. *diepte* ‘depth’ < \**diupipō-*. In nearly all varieties of Dutch, we find the reflex of \**eo*, e.g., ODu. *diopithon* DAT.PL., MDu. *dippe* (Limburg, ca. 1300), elsewhere *diepte*. A single instance of a reflex of \**iu* is eastern Late MDu. *duypte* (*Teuthonista*, 1477). Of course, the vowel of *diepte* may have been influenced by the simplex *diep* ‘deep’.
4. *duiden, dieden* ‘to explain’ < \**piubjan*. In Early Middle Dutch, we find (*be)dieden* in Flanders, Brabant and Limburg, but once *beduden* in Cleves/Guelders. The form *beduden* is rare in Late Middle Dutch and is confined to Holland and other northern texts. Still, in the literary language of the 1500s and 1600s, *bedieden* > *bedien* and *bediet* ‘explanation’ are frequent forms in Holland, too. In the course of the seventeenth century, *bedieden* is replaced by *beduiden* in the standard language.
5. *duister* ‘dark’ < \**biustria-*. The usual Middle Dutch variant is *duuster*, a variant *deester* being once attested in the Dutch *Lucidarius* (Flanders, 1401–50). According to Franck & van Wijk (1912), the hapax *deester* could have originated from the synonym *deemster* if *m* was lost on the model of *duuster*. In view of the total lack of other unrounded occurrences of *duister*, this solution is attractive.
6. *Duits, Diets* ‘Dutch, German’ < \**biudiska-*. Goossens (1966: 91–92) interprets MDu. *Dietsch* in Brabant and western Limburg as a Flemish form, which spread east because of the prestige of the Flemish literary language. Goossens goes on to show that, even in the nineteenth century, dialects from southwestern Brabant to southeastern Limburg still used reflexes of the eastern form *Duitsch* to refer to the indigenous dialect (as opposed to Standard Dutch or German). Hence, he argues, the border between *Dietsch* and *Duitsch* must, in the later Middle Ages, have run between Flanders and Brabant. Mooijaart (1992: 133) objects to this view that the Limburgian Glossarium Bernense (1240) already has *ditsch* ‘teutonicum’. A possible explanation for the latter form is to assume analogical influence of the simplex *diet* ‘people’.
7. *duivel* ‘devil’ < \**deobala-* and \**diubila-* from Latin *diabolus*. In Early Middle Dutch, *dievel* is found in West Flanders and western East Flanders, whereas *duvel* is at home in Ghent, Limburg, Cleves/Guelders, and in the only Hollandish instance. But after 1300 there are various traces of unrounding in Holland too, e.g., *ian diuel* (Amsterdam, 1392), *Ghiisbrecht Divel* and *Heyn Dyvel* (Gouda, 1397 resp. 1408; Goudriaan et al. 2000: 12, 31), West Brabant has both *divel*

- (*Lutgart K*) and *duvel* (*Wisselau, Liege Diatessaron*) in literary sources of the thirteenth century. All modern Dutch dialects have a front rounded vowel such as /y:/, except, of course, for the productively unrounding dialects (GTRP).
8. *guur* ‘bleak, rough’ < WGm. \*ga-xiurja- ‘familiar’. MDu. *ghehiere, gehuer* ‘nice, pleasant’ provided the basis for MDu. *on-ghehure* ‘enormous; awful, nasty’ whence modern *guur* ‘bleak, rough’. In Early Middle Dutch, the adjective is only attested in Flanders and West Brabant, always with *i(e)*. Interestingly, in Modern Dutch, both Zealand and Holland seem to have /y:/, which must represent inland Dutch vocalism or influence from the standard language.
  9. *kuiken, kieken* ‘chicklet’ < \*kiukīna-. Between 1200 and 1300 we find *ki(e)kin*, *ki(e)ken* in all southern dialects, including Limburgian, with the exception of the form *kūken* in Cleves/Guelders. In Holland, the earliest attestations are *cukken, cuyken* after 1390. In modern dialects, the front unrounded vowel /i(:)/ and sometimes /e(:)/ (especially in Brabant) is found in all of French and West Flanders, most of East Flanders, the west of Zealand and western North Brabant, throughout the province of Antwerp and in western Limburg (GTRP). The rest of the Netherlands, and, surprisingly, also south-central Brabant, has /y:/ or its historical descendant.<sup>188</sup> The structural border between modern forms continuing Middle Dutch unrounded *kieken* and rounded *kuiken* in Limburg is given in Goossens 1966: 90, compare Map 43.



Map 43. The border between the types *kieken* (rectangles) and *kuiken* (circles) in Limburg

10. *kuit* ‘calf (of the leg)’ and ‘spawn, roe’ < \*kūt(j)a-, \*kūti- or \*kiuti- ‘soft part of the body’ (MLG *küt* n. ‘intestines, calf, roe’, Scottish and northern English dial. *kyte* ‘belly, stomach’, Bavarian *Kiitz* ‘part of the intestines’; Kroonen 2013: 314).<sup>189</sup>

Middle Dutch *kuite* means ‘calf’, ‘spleen’, ‘animal meat’ and ‘roe’. These meanings are treated separately in WNT, but they probably go back to the

188. Though Heeroma (1935: 93) mentions [kikas] *kuikens* for Assendelft in North Holland.

189. MoWF *küt*, see Hof 1933: 255–7 on the vocalism within Modern Westerlauwers Frisian. Versloot (1994: 71–2, 87–8, and pers.com.) argues that irregularities in the Frisian dialectal correspondences, as well as the late attestation of the word (only from 1705 onwards) point to the word having been borrowed from Dutch and Low German \*/ky:t/ with unetymological sound substitution. Among his arguments are north-eastern dialectal *kút* (instead of expected \**kuot*), Wangerooge *kiit* (instead of \**kuut*), Harlingerland Frisian *kühete*.

same West Germanic etymon, cf. EWN. Kiliaan (1599) mentions *kuyt*, *kijte*, *kiete* 'calf' as being Frisian, Guelrish and Hollandish terms, and *kuyte*, *kiete* 'roe' also as a Flemish word. In modern dialects, the Dutch area has the etymon *kuit* in three different structural-historical forms (TNZN Map 4.8, WVD): \**küt*- without *i*-mutation, \**kiuti*- (with unrounding in the coastal provinces), and \**küt*-/\**kǖt*- for a large number of dialects in which both variants would end up the same. The detailed map in TNZN was summarized in a simplified map in Daan 1940–41, which Map 44 reproduces.



Map 44. *Kuit* 'calf' in Dutch (from Daan 1940–41)

The following historical interpretation can be given. Unmutated \**küt*- is continued by *koet* in North Limburg and sporadically by reflexes elsewhere in Limburg (e.g., Tongerlands *kaait*, Borgloon *koa(ë)t*).

Earlier \**kiuti*- or \**kǖt*- with *i*-mutation is evidenced by most of the dialects east of the IJssel river, which have *kute* (Groningen also *kude*) or *kuut*. Also, the

central and southern parts of Limburg (as far as they do not have the heteronym *brade*) have *i*-mutated *kuut*, and sometimes its plural, *kute*. The Limburgian distribution is mirrored on the other side of the Dutch-German state border. *Rheinisches Wörterbuch* indicates that Geldern has /kut/, whereas most other Ripuarian dialects have a sg. /ky:t/ and a plural /ky:tə/. The meaning can be ‘calf’ (of the leg), but also ‘intestines of small animals’ (such as snails and fish); in the latter case, the word only occurs in the singular.

*küt-/\*kūt-/\*kiut-* with ambiguous vocalism is continued by all dialects of Brabant<sup>190</sup> (except for Budel), western Guelders, Utrecht and Holland, in which WGm. \*ū was fronted unconditionally and merged with \*ū. The actual reflexes vary from *kuut* (Guelders) via *kuit* (Standard Dutch) to *koit* (North Holland, parts of Brabant) and *kout*.

Finally, we witness unrounded *kiete* with /i:/ in Zealand and northern East Flanders, and with /i/ in West and French Flanders (given under the umbrella heading *kijte* in WVD). The long vowel in Zealand presupposes \*eo or the unrounded reflex of \*iu, whereas old \*ī before *t* usually gives short /i/. Hence, the Flemish-Zealandish form may be reconstructed as \**kiuti*.

In summary, a preform \**küt-* is reflected in the Cleves/Geldern area, \**kiuti-* in southwestern Dutch, whereas \**kiuti-* and \**kūt-* can both explain the vocalism in all other dialects. Clearly, assuming only unmutated \**küt-* for Cleves/Geldern beside \**kiuti-* everywhere else would be the most economic solution. The word can be connected with WGm. \**kuttō(n)*- ‘vagina’ (MHG *kotze*, MoDu. *kut*, Kroonen 2013: 314). In the end, they may all go back to a PGm. alternating *n*-stem paradigm \**keudō*, \**kuttaz* ‘bag’ as per Kroonen 2011: 175–6 (cf. OHG *chiot* ‘bag, purse’, ON *koddi* m. ‘pillow, scrotum’, Early MoDu. *kodde* ‘testicle’), followed by generalisation of the *t*-consonantism and the introduction of *u*, *eu* or (secondarily) *ū*-vocalism in the whole paradigm. The different meanings can partly be due to generalisation of a specific number form: we find usage as a collective (‘intestines’, ‘roe’) but also as a count noun (‘calf of the leg’).

11. *lichten, luchten* ‘to lighten’ < PGm. \**liuxtjan-* (ODu. *liughten*, MDu. *lijchten*, *luchten*). The long vowels /i:/, /e:/ and /y:/, which would have been the regular results of the diphthongs \*eo and \*iu in Early Middle Dutch, were shortened to *i*, *e* and *u* in most dialects. The original geographic distribution of the vocalism was disturbed by influence from the noun ‘light’, MoDu. *licht*, which has \*eo. In the west, we must additionally reckon with rounding of *i* or *e* to *u* next to *l*.

<sup>190</sup> The text in Daan 1940–41 is not very reliable. For instance, the northeastern Brabant forms *kout* do not continue \*ū (*pace* Daan, p. 253) but represent the local velarisation of \*ū > \*ui before dental obstruents, cf. Belemans & Goossens 2000: 189. Also, the heteronym *hiesse* in Limburg has nothing to do with *ijseen*, but belongs to *haas*, G. *Hachse*, see TNZN 4.4 ‘knieholte’.

12. *lieden, lui* ‘people’ < WGm. \**liudi-* PL. In Early Middle Dutch, *ie*-vocalism is characteristic of Flanders, Zealand, West-Brabant and, partly, South Holland, whereas *uu*-vocalism (*lude*) is found in Holland, Utrecht, East Brabant and Limburg (Berteloot 1984a Map 124; Berteloot 1984b).
13. *Lutgard* < \**Leudi-gardi-*. In Early Middle Dutch, this name only rarely occurs with *ie*-vocalism, and always in Flanders: *liegaerden* in Bruges, *liegaert* and *ligardis* in Oudenaerde. In Holland, Brabant and Limburg, the first member is either *luit-*, or, in most cases, *lut-*, with vowel shortening before a consonant cluster. See § 9.1.1 for the earliest attestations of the name. Although the name may have entered the Low Countries from the east, according to Lindemans 1950, the distribution of *ie* versus *ui, u* does not contradict the assumption that we are dealing with an indigenous development of ODu. \**Liut-gard-*.
14. *stuit* ‘tail bone, rump’ < \**stiutja-*. In Middle Dutch, only WFle. *stiet* ‘tail bone’ and *ystiet* ‘with a tail bone’ are attested (1287). The *ie*-form was apparently also used in West Brabant, since Kiliaan calls *stuyte* a Hollandish form of *stiete*. In modern dialects, *stiet(e)* is found in Zeeuws Flanders (WZD), in northeastern Flanders, and in Ghent (WVD), next to *stuut(e)*. Since there is also evidence for a preform \**stūt-* (e.g., MLG *stūt* ‘young ox’; ON *stútr* ‘id.’; maybe also Dutch *stuyte, stoete* ‘loaf of bread’), it cannot be excluded that (part of) the *uu*-forms for ‘tail bone’ do not continue WGm. \**iu* but reflect \**ü*.
15. *sturen* ‘to steer, send’, *bestieren* ‘to govern’ < \**stiurjan-*. Early MDu. *stieren* is the only form found in Flanders and West Brabant. All other dialects, including Hollandish, have front rounded *stu(e)ren* in that century, but isolated unrounded forms can be found later. In a charter from Stolwijk (1376) we find several times *styeren* ‘to send’. The Gouda homestead tax register from 1397 lists *stierman Huge* ‘helmsman Hugh’ (Goudriaan et al. 2000: 4), and *stierman* also occurs in Schiedam in the fifteenth century (MNW). In modern dialects, unrounded *stieren* occurs in all of Zealand and on the island of Goeree-Overflakkee, as well as in the conservative Hollandish dialects of Katwijk, Zandvoort and Aalsmeer (GTRP). In most southern Dutch dialects, the heteronyms *zenden* or *schikken* are used, so that the original distribution there cannot be established.
16. *vlies, vluis* ‘film, membrane’ < \**fliusi-*. The Dutch dialectal distribution of *ie* in Flanders versus *uu* elsewhere would be in agreement with a preform \**flius-*. But Franck & van Wijk (1912) and Kroonen (2013: 146) reconstruct for Proto-Germanic an s-stem \**fleusaz*, with oblique cases of the shape \**flius-iz-*, which would yield a West Germanic alternation between \**fleos-* and \**flius-*. Therefore, it is conceivable that *vlies* continues the stem variant with \**eo* whereas *vluis* reflects \**iu*.

17. *vriend* ‘friend’. The noun derives from a present participle \**frijōnd* ‘loving’ (Goth. *frijonds*), in which the two vowels have merged into a diphthong which shared the development of WGm. \**iu* in Continental West Germanic: OS *friund*, MLG *vrünt*, OHG *friunt*, OFri. *friünd*, *friönd* (EWAhd III: 585). Old Dutch has *friund* (Leiden Willeram). In Early Middle Dutch, we find *vri(e)nd* in all southern dialects, with the exception of a single occurrence of GEN.PL. *vründe* in Heinsberg. In Late Middle Dutch, *vrund*, *frunt* is common in northeastern texts ([www.cartago.nl](http://www.cartago.nl)). *Vrunt* also occurs in Guelders and Limburg and in texts from Holland, to begin with, in Dirc Potter’s *Der Minnen Loop* (Holland). *Vrund* is frequent in the literature of the seventeenth century (WNT). In modern dialects, *vrund(schap)* is restricted to central and southern Dutch Limburg and to Groningen and the northeastern half of Drente (GTRP). This restricted occurrence may be due to the ousting of *vrind*, *vrund* by the heteronyms *kameraad* or *maat* ‘pal’, which gave western *vriend* a better chance to spread eastward. It has been argued that Middle Dutch *vrunt* arose from the rounding of *i* or *e* in *vrint*, *vrent* to *u*, compare the case of *sinte*, *sente* ‘saint’ > *sunte* (van Loey 1976: 22). Yet *sunte* is hardly ever found in Holland, as opposed to *vrunt*. Furthermore, the distribution of *vrint*, *vrent* (from shortening in *vrient*) versus *vrunt* (from \**vruunt*) agrees well with that found in other words in \**iu*.

A form *vreent* occurs in Melis Stoke’s rhyming chronicle of Holland and in Jean Froissart’s chronicle of Flanders. It is possible that this reflects the occasional lowering of /i.ə/ to /e:/ as we have seen in § 17.1, as in ‘tithe’.

18. *vuur*, *vier* ‘fire’ < \**fiuri* < PGm. \**feuri* (OE *fior* and OFri. *fiür*), analogically for an original DAT.SG. \**fu(w)eri* (Kroonen 2013: 151). The distribution of variants is the same as for other words in \**iu*. Flemish, Zealandish and adjacent parts of South Holland have unrounded *vier*, whereas the other dialects have /y:/ or /ø:/.
19. *ziekte* ‘illness’ < \**siukipō-*. *Siecte* is the usual form in written Middle Dutch texts from all dialects. Forms continuing \**iu* are only found in Holland, the northeastern dialects, and Limburgian: *sucde*, *suckede* (Limburgse Sermoenen, ca. 1300), elsewhere *suucte*, *suycte* (MNW s.v. *suucte*). Kiljaan (1599) also calls *suyckte* a “Hollandish” word. Since the vowel of *ziekte* may have been influenced by *ziek* ‘ill’, it appears that the *ui*-variant of ‘illness’ continues the original form. In that case, it is interesting to see that it is also found in Holland.
20. *zuinig* ‘stingy’, MDu. *siene*, *sune* ‘clear, good’, *onsiene* ‘ugly’ < WGm. \**siuni-* ‘clear’ (Goth. *ana-siuns*, OE *ge-siene* ‘visible’). Compare also WGm. \**siuni-* f. ‘face; appearance’ (Kroonen 2013: 435) which yielded MDu. *siene* ‘eyesight’, *sune* ‘face, vision’. The Middle Dutch ADJ. *siene* is characteristic of the Flemish literary language, though it is also found further east. The *uu*-forms are rare. In Modern Dutch, on the contrary, only *zuinig* ‘stingy’ has survived. It has

probably entered the standard language from north(east)ern dialects: MDu. *sunich* ‘meticulous’, *onsunich* ‘of impure mind’ (Hol., 1440–55), *sticksuynigh* ‘short-sighted’ (Cleves/Guelders, 1477).

## Discussion

The words which probably continue ODu. \**iu* in all dialects without too much analogical interference from \**eo*-forms are 1 *briel*, 2 *duur*, 4 *duiden*, 6 *Duits*, 7 *duivel*, 8 *guur*, 9 *kuiken*, 10 *kuit*, 12 *lieden*, 13 *Lutgard*, 14 *stuit*, 15 *sturen*, 17 *vriend*, 18 *vuur*, 20 *zuinig*. They clearly have *ie*-vocalism in Flanders, Zealand, and to varying extents in southern Brabant. Elsewhere, they show *uu*-vocalism. It has been claimed that unrounding to *ie* was more restricted in Holland than in Flanders and Zealand, in the sense that it would occur only before *r* in Holland (see the handbook references above). Yet this is not borne out by our data. True, for *duur*, *guur*, *sturen*, *vuur*, there is evidence for *ie* in southern South Holland and in archaic dialects further north. But for *lieden* and *duivel*, *ie*-vocalism is also present in the same regions, and it may have been so from the thirteenth century on (Berteloot 1984b). The same cannot be proven for *bedieden*, but it is at least possible on the basis of the Early Modern Dutch forms.

For most of the other words discussed in this section (nrs. 3, 5, 11, 16, 19), we only rarely have localizable information about the distribution of *ie* vs. *uu* in Middle Dutch. I therefore agree with Heeroma (1935: 92–5), that \**iu* originally yielded /i(:)/ in all of Hollandish. If we assume, then, that Flanders, Zealand and Holland originally shared the reflex \**iə*, whereas all of Brabant – at least in Old Dutch times – and the areas to its north and east had \**ŷ*, the isogloss between these reflexes is the same as that between other phenomena separating coastal Dutch from inland Dutch. Words showing *ie* in all of southern Brabant and western Limburg already in Middle Dutch, such as *dier* ‘dear’ and *kieken* ‘chicken’, must then reflect paradigmatic alternation between \**eo* and \**iu*, with generalisation of \**eo* or its introduction from cognate words.

The unrounded versus rounded reflexes of \**iu* can be connected with the western absence versus the eastern presence of secondary *i*-mutation on low and back vowels. The majority of handbooks explicitly deny a connection of eastern *uu* with *i*-mutation. Schönfeld & van Loey (1970), for instance, claim that \**i* in the diphthong \**iu* was rounded by \**u*, followed by contraction (\*[iu] > \*[yu] > [y:]), whereas van Bree (1987: 111) suggests the reverse assimilation of \**iu* to \**[iy]* plus contraction to [y:]. Goossens (2008: 68) talks about mutual assimilation.

Two main arguments have been put forward against an explanation via *i*-mutation. The first one is of a dialectgeographic nature: the merger of \**eo* and \**iu* is spread further east than is usual for the absence of *i*-mutation. As we have

seen, this claim is incorrect, since the original isogloss does seem to have separated Flanders from Brabant. The second objection which has been voiced is chronological: the distinction between \*eo and \*iu already arose in Proto-Germanic. This argument is valid only if one regards eastern /y:/ as necessarily reflecting mutual assimilation in the diphthong \*iu. If we assume that *i*-mutation in a sequence \*-iu-i- produced \*-iy-i-, followed by a contraction of \*iy to /y:/, as seems perfectly possible, the Proto-Germanic origin of \*iu versus \*eo becomes irrelevant, since the much later *i*-mutation would give the same results.

I therefore find myself agreeing with Heeroma (1938: 239), who states that (in eastern Dutch) [iu] became [iy] by *i*-mutation, and was then assimilated to [y:]. Inherited \*eo, however, became [iə], whence modern *ie*. Dutch *uu* and *ie*, therefore, do not directly reflect a Proto-Germanic alternation between \*eo and \*iu, since the latter was affected by Old Dutch *i*-mutation. The western merger of \*eo and \*iu makes sense when connected with the absence of *i*-mutation in coastal Dutch. In a language contact scenario, the allophone [iy] could have been adopted by L1-speakers of Proto-Frisian as [iu], or maybe even lowered to [io], and then shared in the Late Old Dutch reduction of \*eo to [iə] in the tenth or eleventh century.<sup>191</sup> In a continuity scenario, such as the one adopted by van Loon (2014: 129), the absence of *i*-mutation on \*iu matches the absence of *i*-mutation on other low and back vowels in western Dutch, and might point to an earlier date for the reduction of unstressed \*i in coastal Dutch than in inland Dutch.

## 19.5 The rise and unrounding of so-called “ui<sub>2</sub>”

Next to the diphthong *ui* from WGm. \*ū, Early Middle Dutch had also acquired a diphthong *ui* /oey/ from a few other sources, none of them very frequent. This phoneme is sometimes called “ui<sub>2</sub>” in Dutch linguistics (Muller 1921, van der Meer 1927: 63–4, 260–61, Goossens 1974: 44, van Loey 1980: 78). Whereas “ui<sub>1</sub>” is spelled consistently as <u>, <ue>, <uy>, and eventually <ui>, the older diphthong “ui<sub>2</sub>” has many more spelling variants. This is partly caused by the different native and foreign sequences which fed into “ui<sub>2</sub>” (see directly below), and partly by the fact that this diphthong was

<sup>191</sup> Written sources do not tell us which phonetic stages lay between WGm. \*iu and southwestern MDu. *ie*. The Lex Salica (ca. 600) still shows a spelling <eu> or <eo> for the diphthong, viz. in *leudinia*, *leodinia* ‘money for a woman’, if representing a derivative \*liud-inna with ONW. For the subsequent phases of Old Dutch, hardly any reliable evidence is available (cf. Mansion 1924: 211–14). Maybe the toponym *Tielt* in West Flanders, if from \*tiulithi (thus ONW), shows that monophthongization had taken place in the first half of the twelfth century: *de Tiletō* (1119 copy 1126–50).

new to the phonemic system, and hence speakers were probably very uncertain about how to spell the sound. Three typical types of spelling for *ui*<sub>2</sub> are (1) *o*-combinations, such as *oei*, *oy* (MDu. *loei*, *loye* ‘lazy’); (2) *u*-combinations, such as *uy*, *ui* (*luy*, *lui*), *eu(i)*; (3) unrounded diphthongs, such as *ey*, *ei* (Early MoDu. *ley*); cf. Muller 1921: 146–8. The unrounded reflexes are mostly West Flemish (Muller 1921: 152).

For *ui*<sub>2</sub> several different etymological sources can be distinguished.<sup>192</sup> A language-internal source was the West Germanic combination \*-uj-, viz. in *lui* ‘lazy’ < \*luja-, *spui* ‘lock, sluice’ < \*spujōn- and *hui* ‘whey’ < \*xuja- (StDu. *wei* < \*xwaja-; Kroonen 2013: 261). A rather large, second group consists of French loanwords with Old French *ui* /yj/ or *ehu*, *ahu* /ɔyl/, /ay/, such as StDu. *fruit* ‘fruit’, *fluit* ‘flute’, *pui* ‘front of a house’, *buitelen* ‘to tumble’ (Early MoDu. *buyleten*, *beytelen*, *beutelen*). In some cases, an unrounded French diphthong was rounded to *ui*, as in *wambuis* ‘vest’ (OFre. *wambais*), which also occurs in Middle Dutch as *wambeis*, and *fornuis* ‘stove’ (OFre. *fornaise*), MDu. also *forneise*. A third source for *ui*<sub>2</sub> was the sequence \*-īwa- in MoDu. *sputien* ‘to squirt, gush’ < \*spīwatjan- (MDu. *speiten*, *spoyten*, *spouten*). A fourth set of input forms was provided by the sequence \*-olt/d-. The *l* was normally vocalized to a labial approximant in -out-, -oud- in Early Middle Dutch, but it sometimes yielded a palatal glide, in Flemish -oit-, -oid-. This development looks like *i*-mutation, cf. Mooijaart 1992: 155; but we also have *oi* from words without any *i*-mutation factor, such as Early MDu. (*Ar*)noid in Zealand and once *gewoyt* for *ghewout* ‘power’. This fourth *oi* can also be unrounded to *ei* or fronted to *ui*, as shown by a number of personal names and surnames: *Baldwin* > *Boidins* > *Buyens*, *Woutijn* > *Weitin*, *Walter* > *Woyte*/Weyte > *Wuyts*, *Weyts*, *Arnold* > *Noyte*/Neyt > *Nuyts*/Neyts. The unrounding to *ei* is typical for Flemish whereas *ui* is more frequently found in Brabant.

Goossens (1981: 62–63) claims that the unrounding of *öü* in part of Flemish may also be regarded as an Ingvaeanic feature. Of course, the late rise of *ui*<sub>2</sub> means that its unrounding in Flanders cannot be a direct reflex of any Frisian-Franconian language contact. Still, it is possible to hypothesize that the Early Middle Flemish unrounding of /oey/ could take place because a diphthong of this type did not yet occur in the vowel system, whereas in Brabant and Limburg \**ää* often yielded a front diphthong of the type /oey/. Since the change of *olT* to *oiT* is Late Old Dutch and since the French loanwords are not to be trusted (since some of them may have had an unrounded vowel in French), the most interesting category of words for a historical investigation are those in \*-uj-. Unfortunately, these words are poorly attested in the corpus. The words *lui* and *bui* are lacking from Early Middle Dutch altogether. The word *spui*, attested thirty-nine times before 1300, appears as *spoye*,

<sup>192</sup>. Recent investigations, as reported in EWN, have led to a considerable reduction in the number of words for which an internal development leading to *ui*<sub>2</sub> is reconstructed.

*spolie* in Holland (4x) and as *spoy/ie* in Ter Doest Lissewege (WFla., 15x), whereas in Bruges and Damme, both vocalisms are attested (Bruges: 10x *spoy/ie*, 7x *spey/ie*, Damme: 4x *spolie*, 1x *speie*). In East Flanders (4x) and Mechelen (1), *spei(e)* is the only form found. A verb *ute spoien* ‘to spit out’ is attested once in West Flemish (*Der Naturen Bloeme* D, 1287). These data are confirmed by the CRM14 corpus, even if the noun is only found in The Hague and Bruges: *op die spoeye* (The Hague, 1385), *van der spoeye* (The Hague, 1385), and always *speye* in Bruges in documents between 1351 and 1400, also *speyhoudere* ‘sluice holder’ (1360). Modern dialects do not help to clarify the situation, as the number of relevant words is very small. The typical division is between *spui* in northern Dutch, including Zealandish *spuije* (WZD), and *spei* in southern dialects.

The word *hui* ‘whey’ occurs as *hey* in the West Frisian Town Laws. Kiliaan mentions *huy*, *hoy* as Frisian and Hollandish forms for ‘whey’, and *hoy*, *hoeij* as Hollandish and Guelrish, the latter of which could hide a pronunciation /hœy/. Seventeenth-century literature from Holland has *hui*. Modern North Hollandish dialects, however, seem to have only *wei*. For West Flemish, de Bo (1892) has compounds such as *melkhei* ‘whey from milk’, but nowadays, *wei* seems to be the only living form in Flemish dialects (WVD). De Bo also has the verb *weien* ‘to whey’, with a variant *heien*.

## 19.6 Summary and conclusions

### Summaries

- A. With \*ü, three forms provide certain evidence for old unrounding:
  1. *hide*, *-ijde* ‘fishing port’ < \*xübjō-.
  2. *hiden* ‘to hide’ < WGm. \*xüdjan- in Oostende (1403–04) and Reinaert ms. E (1276–1300).
  3. *kies* ‘molar’ < \*küs(jō)(n)-, but Saxon *koeze* etc. < \*kūsō(n)-; or OS NOM.SG. \*kūsi > *kūs*, OBL. \*küs(jō)- in the oblique cases; or WGm. \*kūsi-.

The names in *hide*, and indeed the word itself, are absent from inland Dutch. Their unrounding can therefore hardly be due to the borrowing of an Old Franconian term in [y:] into coastal Dutch with adoption of the stressed phoneme as /i:/ (in which case they would be unique as against the usual adoption with /u:/). Rather, the word must be a loan from Proto-Frisian or a more recent borrowing from English due to the North Sea trade (Taeldeman 1982: 289–90). The elements *hide* ‘harbour’, *hiden* ‘to hide’, *kite* ‘kite’, *brine* ‘brine’ are discussed by Heeroma (1952). Since unrounding of \*ü yields Old Frisian /e:/ rather than /i:/, and since these

words are restricted to Flanders, Zealand, and, at most, the southern regions of South Holland, Heeroma proposes to see these forms as imported from English. In view of the late date of unrounding in Old English, he even suggests that they may have come from Middle English. Yet neither of these two arguments in favour of an English origin is compelling. The unrounding of \*ü may have given a different reflex /i:/ in southernmost Proto-Frisian as spoken in Flanders. And the restriction of these words to southern coastal Dutch may be purely coincidental, or even, for *huden*, not completely true.

B. For unrounding of \*ö, the following evidence remains:

1. *ondievelike, ondieft* vs. Flemish *ongedoeve, gedoevig*. The Hollandish forms were probably borrowed from PFri. \*gadēve.
2. *griede, griedlant, begrieden, gried* ‘top layer of pasture’: borrowed from OFri. grēde ‘grassland’.
3. *hiel* ‘heel’ < PGm. \*xanxila(n)- ‘little hook’, cf. also F. \*xāxilō-. Borrowed from PFri. \*hēla(n)- in Flanders? Or an internal formation of Old Franconian?
4. *smieë* ‘smooth’, borrowed from PFri. \*smēpi- < \*smōpi- < \*smanpi-.
5. *Suetan, Swieten* borrowed from OFri. swēte.

*Ondief, griede* and *Swieten* are restricted to Holland, and quite clearly represent direct borrowings from Old Frisian into Old or even Middle Dutch; two of them concern local toponymy. *Hiel* and *smieë*, on the other hand, are present in Flemish and must therefore be older. Since *smieë* displays the un-Franconian nasal loss before \*p, we cannot escape the conclusion that this form – and its unumlauted counterpart *smood* – was borrowed from Proto-Frisian. For *hiel*, much seems to speak in favour of the same conclusion, but note the following. The word itself was clearly known in all of Continental West Germanic, and may therefore have been present in Old Franconian. If so, it would qualify for *i*-mutation of \*ā, i.e. a pre-stage \*hāhilan-.<sup>193</sup> Normally, we find no trace of secondary *i*-mutation of \*ā in coastal Dutch, but here, we have a special case, in that the intervocalic \*h would have dropped at an early stage (cf. *sehan* > *sean* > *sien* ‘to see’). It seems possible that \*hā'ilan- was phonologized as \*hē(ə)ilan-, with the same Brabantish /e:/ and Flemish /i.ə/ which resulted from \*eo. If this explanation is correct, *hiel* is not a frisianism in Dutch.

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<sup>193</sup>. Arjen Versloot informs me that the Wangerooge form *hil* may actually be seen as supporting this reconstruction, since it can continue PFri. \*i, \*i in open syllable or \*ei, but not normally \*hāēl- from *i*-mutation of \*honx- < \*hanx-. A preform \*hē-ilan- was already considered by Löfstedt (1931: 146) with reference to Mainland NFr. forms.

- C. For unrounding of \*äü, I retain the following forms:
1. NHol. *opdiemen* ‘to emerge’ from OFri. \*dēman.
  2. NHol. *stiemen* ‘to smoke’ from OFri. \*stēman.
  3. *teem* ‘instrument for making haycocks’, NHol. *tiemen* ‘to make haycocks’ from OFri. \*tēman.

These clearly represent Old Frisian borrowings in dialects of North Holland.

- D. WGm. \*iu systematically has an unrounded reflex in Flanders, Zealand and Holland. As I have argued in § 19.4, this situation is best interpreted in the same way as the absence of *i*-mutation on all other low and back vowels in western Dutch. The unrounding can either be explained from a language contact scenario, with eastern \*/iy/ being adopted as \*/iu/ in western Dutch, and then following the regular path to /iə/ > /i(:)/ which \*eo also took; or from a continuity scenario, with an internal cause for the absence of *i*-mutation.

### General conclusion

Of the forms in \*ü, \*ö, and \*äü, most of the reliable evidence concerns borrowings from Old Frisian – especially as regards words restricted to North Holland – or Proto-Frisian, viz. all three forms with \*äü, four of the five forms with \*ö, and *hide* ‘port’ with \*ü. This leaves *hiel*, *hiden*, and *kies* unaccounted for. A possible internal alternative for *hiel* has been given above. The distribution of *kies* ‘molar’ (absent from Flanders – though of course this may be due to later loss) can be reconciled without many difficulties with an origin as a borrowing from OFri. *kēse*.

## WGm. \*ai

The regular reflexes of \*ai in Standard Dutch are *ei* and *ee*. Their distribution depends on the phonetic surroundings but is also subject to dialect variation. Dutch displays a structural split between a southeastern area where \*ai developed according to the same conditions as in High German, and the remaining Dutch area which follows a different development.<sup>194</sup> In High German and in central and eastern Limburg, \*ai was monophthongized to OHG ē in front of WGm. \*x, \*w, \*r, and in absolute auslaut. In other positions, the diphthong was retained as OHG *ei*. In most Dutch dialects, however, \*ai only yields *ei* before \*i or \*j in the following syllable; otherwise, it contracts to Early MDu. /ɛ:/, StDu. *ee*. Van Coetsem (1968) and Goossens (1981) assume that the Proto-Germanic raising/lowering mutation (viz., the raising of mid vowels before *i, j, u* in the next syllable, and the lowering of high vowels before a low vowel) caused the split of \*ai in two variants, viz. \*ai before *i, j, u* in the following syllable and \*ae elsewhere.

The original distribution of \*ai can be disrupted by lexical and morphological analogies. For instance, the regular vowel difference between MDu. *eek* ‘oak’ and *eikijn* ‘of oakwood’ does not survive into Modern Standard Dutch because the simplex became likewise *eik* (van Bree 1987: 101). In some cases, variation between *ei* and *ee* in Standard Dutch is due to different suffixal formations from the same root. Thus, we find *gereed* ‘ready’ < \*ga-raipa- versus *bereid* ‘prepared’ < \*bī-raipja- (unless *bereid* was taken from the verb *bereiden* ‘to prepare’ < \*raipjan-). Different suffix vowels have also been invoked to explain StDu. *teken* ‘sign’, *vlees* ‘meat’ beside Hollandish *teiken* and *vleis*. Franck & van Wijk (1912) assume a secondary *in*-suffix for *teiken*, the reality of which is confirmed by Early Middle Dutch spellings from Flanders (*tekin*, *teikin*, WFla.), Zealand (*tekinen*, Zierikzee) and Holland (*tekiin*, WHol.). However, as we can see, the *in*-suffix does not always preclude monophthongisation, and for ‘meat’ this explanation requires the reconstruction of two different preforms: WGm. \*flaiska- and \*flaiski-.

The structural, etymological distinction between the two variants \*ae and \*ai as [ɛ:] vs. [eɪ] is valid for the central Dutch dialects of Brabant and Utrecht, and its

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<sup>194</sup>. Cf. Goossens 1981: 68–70, 76, van Bree 1987: 100–1, van Loon 2014: 121–4, *FAND* II/III: 273–301.

restriction to this area is even clearer in Early Middle Dutch than in the modern dialects. In Flanders, there is evidence for a general monophthongization of \*ai in all positions except before \*j (thus van Loon 2014: 122, who dates the change to /e:/ to around 900). The first subsection below will discuss the evidence for this phenomenon (§ 20.1). In Holland, medieval sources show a large number of ie-spellings which seem to occur in particular phonetic contexts. They may reflect an earlier monophthong similar to Flemish ee, and hence show a specific coastal Dutch development of \*ai (20.2). Smaller sets of reflexes of \*ai as aa (20.3) and oo (20.4) have been explicitly connected with a Frisian substrate in coastal Dutch.

## 20.1 Flemish ee and ei

In Flanders, the reflexes ee and ei display a fan-shaped distribution in modern dialects. Monophthongal ee (which is realized as eeë in French and West Flanders but as ieë in East Flanders) is dominant in French and West Flanders, but gives way to diphthongal ei (and its local continuants) progressively as one goes east. The isogloss between ee and ei runs differently per word. In general, the most easterly occurrences of ee in words which have ei in Standard Dutch coincide with the border between East Flanders and Brabant, see the discussion in *FAND* (II/III: 274) and Taeldeman (1979: 77). According to the latter, Flemish always has the ei-reflex in the equivalents of Standard Dutch *keizer* ‘emperor’, *reis* ‘journey’, *breien* ‘to knit’, *ei* ‘egg’, *mei* ‘May’, *kei* ‘stone’. The last four of these words reflect word-final \*-ai, internal \*-ajj-, or the palatalisation of \*ag (in *breien*), three categories where the diphthong could be retained longer or arose at a later date. *Keizer* and *reis* are high-register words which may have been taken from the standard variety. Conversely, Flanders always displays the ee-reflex in *scheiden* ‘to separate’, *leiden* ‘to lead’, *dreigen* ‘to threaten’, *beitel* ‘chisel’, *eik* ‘oak’, and a gradual decrease of the ei-reflex from east to west in *geit* ‘goat’, *sprei* ‘bed spread’, *weide* ‘pasture’, *klein* ‘small’ (see also van Loey 1967: 49). This geographical situation is very similar to the increasing reduction of unconditioned fronting of \*u in Flanders from west to east. It seems likely, then, that the reflex ei has been encroaching on former ee-territory during the last centuries. The words *eigen* ‘own’ and *reiger* ‘heron’ have ei in all of Flanders except for French and southwestern West Flanders.

In the thirteenth century, most etyma in \*ai show monophthongization to ee in Flemish, even before an i-mutation factor, e.g., *clene* ‘clean’, *eghen* ‘own’, *bede* ‘both’, *helech* ‘holy’ (van Loey 1967, Schönfeld & van Loey 1970: 75–6, van Loey 1980: 46–9, Berteloot 1984a: 76–9, 86–8, Map 92–99, 116–19, Mooijart 1992: 142–51). But there are also words with an ascertained diphthong. Van Loey (1967: 61–2) acknowledges

for Flemish the occasional but linguistically real (as shown by evidence from rhyming pairs) occurrence of the diphthong *ei* before an original *i*-mutation factor in *beide* 'both', *beiden* 'to bide', *bereiden* 'to prepare', *ghemeine* 'mean', *gereide* 'ready', *heide* 'heath', *cleine* 'clean', *leiden* 'to lead', *reine* 'clean' and *weide* 'pasture', versus *ee* in the non-mutated words *alleen* 'alone', *been* 'bone', *breed* 'broad', *geen* 'none', *leed* 'sorrow', *steen* 'stone', *ween* 'pain', *weet* 'knows'. Furthermore, in prose texts, Flemish has *einig* 'single', *gheist* 'spirit', *inheims* 'local', *meister* 'master', *veinoot* 'companion'. Thus, *ei* may have been autochthonous in at least some varieties of Flemish, but the spelling disappears after 1400 (except in *arbeid*, *eigen* and *-heid*). Van Loey (1967: 64–5) duly notes that most of the *ei*-words have a following dental consonant, which may have acted as a conditioning environment.

Taeldeman (in *FAND II/III*: 274, 290) assumes that Flanders originally had the same etymological distribution as Brabant, but that *ei* was often replaced by *ee* in a western area with its centre of gravity in West Flanders. Yet if such were the case, the position of the isoglosses would be difficult to understand: How could *ee* in some words be restricted to southwestern Flanders? Why do some words show *ee* in eastern but not in western Zeeuws Flanders? Why does the eastern limit of the *ee/ei*-area coincide with many other vowel isoglosses between western and central Dutch, which show lexical diffusion of the Brabantish forms into Flanders (such as the unconditioned fronting of \**u*)? It seems more likely that van Loon (2014: 122–3) is correct in assuming that all of Flanders originally had the *ee*-reflex in all words except where \**ai* stood in auslaut, before \**j*, or arose from \**ag* in Late Old Dutch. The Brabantish distribution was gradually adopted in East Flanders, with *ei*-words replacing original *ee*-words. Van Loon adduces additional evidence from place-names and surnames, such as those with 'oak' (toponyms *Eeklo* in East Flanders, 1252 *Eclo*, *Zeveneken* in East Flanders, 1220 *Seveneken*; the surname *Vereecken* in East Flanders). In van Loon's view, the different Flemish reflex of \**ai* is caused by an early reduction of unstressed \**i* to [i] or [ə] in Flanders, which in its turn blocked *i*-mutation as it applied further east. In Buccini's framework of a Frisian-Franconian language shift, the absence of *i*-mutation on \**ai* in Flanders could be explained in the same way as the absence of secondary *i*-mutation on other vowels.

## 20.2 Hollandish *ie* and *ei*

Table 44. *ie* from \**ai* in medieval Hollandish (Heeroma 1935)

Town:	Before <i>n</i>	Before <i>m</i>	Before <i>t</i>	Auslaut
Alkmaar	<i>ghien, lienen, myent</i>	<i>liemen</i>		<i>twie</i>
Enkhuizen	<i>lienen, stien</i>			<i>twie</i>
Hoorn	<i>ghemien, ghien, lienen, stien</i>	<i>liemen</i>		<i>twie</i>
Edam	<i>lienen, stien</i>			
Amsterdam	<i>ghien, lienen, stien</i>		<i>hieten</i>	
Naarden	<i>ghien, yenich, myent</i>			
Haarlem	<i>gemien, ghien, lienen, stien</i>	<i>liemen</i>	<i>hieten</i>	<i>twie</i>
Leiden	<i>alliens, ghien, lienen, stien</i>	<i>hiemraet, liemen</i>	<i>hieten</i>	<i>twie</i>
Delft	<i>lienen, stien</i>	<i>liemen</i>		<i>twie</i>
Schiedam				<i>twie</i>
Rotterdam		<i>hiemraet, liemen</i>	<i>behiete</i>	
Gouda	<i>yen</i>	<i>hyemraed</i>	<i>hyeten</i>	
Schoonhoven			<i>hieten</i>	
Brielle			<i>hieten</i>	
Vianen				<i>twie</i>

Mooijaart (1992: 148–49) finds that \**ai* is raised to Early Middle Dutch <*ie*> in many parts of the Low Countries before *r*, viz. in *eerst* and in *tweer*, the GEN.PL. of ‘two’. In other positions, <*ie*> is mainly Hollandish, though a number of dialects in East Flanders and southwestern Brabant also show it (see van Loey 1980: 38, Berteloot 1984a, maps 92 and 93).

It has long been known that MDu. /e:/ or /ɛ:/ from \**ai* was raised to <*ie*> /iə/ or /i:/ in Hollandish (Heeroma 1935: 90–1, Schönfeld & van Loey 1970: §65c), but the exact conditioning is uncertain. The clearest environment is a following nasal, whence forms such as *ien* ‘one’, *mien* ‘mean’, *bien* ‘bone, leg’, *stien* ‘stone’, *hiem* ‘home’, found in Late Middle and Early Modern Dutch of North Holland and northern South Holland. Other *ie*-environments are before *t* (*hiete* ‘to be called’) and in auslaut (*twie* ‘two’). In the West Frisian town laws from the fifteenth and sixteenth centuries, *ie* is quite frequent in a restricted number of words. From his corpus of edited charters and legal texts from the later Middle Ages, Heeroma (1935: 11) assembled the collection of words spelled with *ie* which is reproduced here in Table 44.<sup>195</sup> The towns are listed roughly from north to south.

195. The table contains evidence for the Standard Dutch words *alleen* ‘alone’, *een* ‘one’, *enig* ‘any, single’, *geen* ‘none’, *gemeen* ‘mean’, *heemraad* ‘member of a polder board’, *heten* ‘to be called’, *leemen* ‘loam’ (ADJ.), *lenen* ‘to lend’, *menen* ‘to mean’, *steen* ‘stone’, *twee* ‘two’.

Table 45 provides the additional attestations from the corpus CRM14 (some forms may overlap with Heeroma's collection). Note that the 'other consonants' are dental consonants in all instances (*d, l, r, st, t*). The numeral *twie* had paradigmatic forms with *-r* and *-n* which could have given rise to *ie* (genitive *tweer*, dative *tween*), and we cannot exclude analogy with *drie* 'three' (Franck 1910: 193). The fact that Haarlem provides more attestations than other Hollandish towns is largely due to the fact that the corpus contains a disproportionate number of documents from there. The name *van foriest*, found twice in a charter from 1389, contains MDu. *foreest*, a French loanword, and confirms that *ie* is due to raising of earlier *ee*. The word *clien* corresponds with its variant *cleen*, as opposed to *i*-mutation in MDu. *klein*, StDu. *klein*.

**Table 45.** *ie* from *ai* in 14th-c. Hollandish (CRM14)

	Before <i>n</i> or <i>m</i>	Before other consonants	Auslaut
Den Burg			<i>twie</i> 1400
Barsingerhorn	<i>ienen</i> 1398		
Hoorn	<i>ghemyen</i> 1393, <i>stien</i> 1360		<i>twie</i> 1388–93
Alkmaar	<i>miene</i> 'common' 1340, <i>iene</i> 1340, <i>ienen</i> 1348	<i>ghiestlant</i> 1346	
Egmond-Binnen	<i>ghemieneliken</i> 1317, ( <i>te</i> ) <i>liene</i> 1363, <i>erfliene</i> 1381, <i>lienware</i> 1333, <i>te lient</i> 1336, <i>liengoet</i> 1395, <i>te lien</i> , <i>verlient</i> 1395	<i>rentemiester</i> 1317, <i>ghiesten</i> 1381, <i>ghiertrude</i> 1363	<i>twie</i> 1381, 95
Akersloot	<i>ghemienen</i> 1357, <i>ghemiene</i> 1369	<i>in gherieden ghelde</i> 1357	
Castricum	<i>twien</i> 1378		
Beverwijk	<i>lyen</i> 'loan' 1388, <i>cliene</i> 1332, <i>claes</i> 1332, <i>ghien</i> 1379, <i>miens</i> 1332	<i>ons hieren</i> 1332, <i>ghiertrwt</i> 1388	<i>tuie</i> 1332
Haarlem	<i>clais clienebien</i> 1331, <i>mienen</i> 1331, <i>ghemienen</i> 1333, 1353, <i>cliene</i> 1333, <i>twiene</i> 1381	<i>hiet</i> 1330, 1375, <i>ghehieten</i> 1316, <i>ghiest</i> 1341, <i>elsghiest</i> 1341, <i>ghiestlants</i> 1330, <i>miester</i> 1316, 1320, <i>myesters</i> 1354, <i>gasthwsmiesters</i> 1378, <i>scoelmiester</i> 1333, <i>van foriest</i> 1389, <i>ghehiel</i> 1320, <i>hiele(n)</i> 1385, <i>dielen</i> 1380, <i>wederdiel</i> 1333, <i>mier</i> 'more' 1316, <i>ons hieren</i> 1331, <i>ghiertruid</i> 1331, <i>cieldermakers</i> 1348, <i>ghecliet</i> 'clothed' 1376, <i>briet</i> 'broad' 1378	<i>tuie</i> 1320, 1347, 1378–89

(continued)

Table 45. (continued)

	Before <i>n</i> or <i>m</i>	Before other consonants	Auslaut
Amsterdam	<i>yenighen</i> 1389, <i>ghiene</i> 1360, <i>tvien</i> 1371–96	<i>hiliche(misse)</i> ‘holy’ 1384–87	<i>tvie</i> 1360–96, <i>twie</i> 1392–96
Amstelveen	<i>ghienen</i> 1398		<i>tvie</i> 1390
Valkenburg		<i>ghehieten</i> 1376	<i>twie</i> 1376
Leiden	<i>twien</i> 1399, <i>yenen</i> 1353, <i>te liene</i> 1346, <i>virlienen</i> 1346, <i>ghemienen</i> 1393, <i>ghemienlic</i> 1364, <i>ghemienre</i> 1366, <i>ghemiente</i> 1393, <i>ghienrehande</i> 1393, <i>ghelienden</i> 1339, <i>stienberghen</i> 1346, <i>twien</i> 1344, 1366, 1399	<i>hiet</i> 1344, <i>ghehieten</i> 1346, 1353, 1399	<i>twie</i> 1342–99
Voor-schoten	<i>ghemiene</i> 1342, <i>ghemienlike</i> 1381, <i>te lien</i> 1360, 1381		<i>twie</i> 1382
The Hague	<i>myene</i> ‘common’ 1350, <i>ghemyene</i> 1350, 1357, <i>ghemienen</i> 1363–85, <i>ghemienre</i> 1363, <i>stienwerpers</i> 1395, <i>stienaerts</i> 1396	<i>ghehieten</i> 1377	
Delft	<i>ghiene</i> 1313, <i>ghemiene</i> 1332, <i>ghemiens</i> 1400, <i>stien</i> 1370	<i>ghehieten</i> 1310	<i>twie</i> 1358–98
Monster	<i>ghemienen</i> 1357, <i>twien</i> 1359		
’s-Gravezande			<i>twie</i> 1369
Gouda	<i>ghemiene</i> 1324		<i>twiestraet</i> 1361
Stolwijk	<i>hyemraet</i> and <i>hyemraders</i> 1376		
Schoon-hoven		<i>hieten</i> 1399	
Dordrecht		<i>hiet</i> 1386	<i>twier</i> 1307

In the seventeenth century, the raised reflex appears in low-register speech in the farces. Nauta (1893: 12) gives instances of *ie* from \**ai* in Bredero’s language before *n*, *r*, *s*, *d/t*, *k*, *l*, and *p*. Crena de Longh (1959: 38–9) notes that this phenomenon is much less common in Delft, where it is mainly restricted to the position before

*n: ien* ‘one’, *gien* ‘none’, *allien* ‘alone’, *iens* ‘once’, *eveniens*, *eveliens* ‘also’, *twien* OBL ‘two’, *bien* ‘leg’, *treckbien* ‘to limp’, *lienen* ‘to borrow’, *mien* ‘to think’, *stien* ‘stone’, *schoorstien* ‘chimney’.

For all of these words, *ee*-variants are much more frequent in the texts of van Santen. Before other consonants, rare instances of *ie* are *hieten* ‘to be called’, *swiep* ‘whip’, *bliek* ‘bleak’.

Thus, whereas most of the Hollandish raising of \**ai* to *ie* is found before dentals, nasals and in absolute auslaut, there are some examples of *ie* before *k* and *p*. It is possible that the dialects had raised this vowel across the board, but that writers consciously avoided it (or, in the farces, deliberately applied it) because it was a marked low-register phenomenon.

For the modern North Holland dialect of Zaanstreek, Boekenoogen (1897: xxii-xxiii) claims that \**ai* is represented as *ie*, except in words where (according to Boekenoogen) the original dialectal form was ousted by the standard language. He gives a large number of *ie*-forms, including before labials and velars: *bien* ‘leg’, *diel* ‘part’, *diele* ‘to divide’, *driege* ‘to threaten’ (next to *dreige* as in StDu.), *giere* ‘to slant’ and *giering* ‘slanted piece of land’, *hiet* ‘hot’, *hiete* ‘to be called’, *ien* ‘one’, *gien* ‘none’, *allienig* ‘alone’, *ier* ‘before’, *ierst* ‘first’, *kliem(r)ig* ‘not well-baked’, *kliene* ‘to make small’, *klienzeer* ‘easily hurt’, *liem* ‘loam’, *lien* ‘loan’, *liene* ‘to loan, borrow’, *miene* ‘to think’, *mient* ‘community’, *gemien* ‘common’, *mier*, *miest* ‘more, most’, *mieuw* ‘seagull’, *mieuweg* ‘sleepy’, *pieuwe* ‘to complain’, *snie* ‘snow’, *snieuwe* ‘to snow’, *stien* ‘stone’, *tien* ‘twig’, *tiene* ‘made of twigs’, *twie* ‘two’, *vie* ‘cattle’, *wiedas* ‘woad-ashes’, *wiek* ‘weak’, *wieneg* ‘little’, *zie* ‘sea’, *ziel* ‘rope’, *ziep* ‘soap’, *zwiet* ‘sweat’, *zwiete* ‘to sweat’. Note the *ie*-reflex for StDu. *klein* and *weinig*. As “geheel verouderd” [“completely antiquated”], Boekenoogen regards the *ie*-forms for StDu. *bleek* ‘bleak’, *breed* ‘broad’, *gereedschap* ‘tool’, *geest* ‘spirit; kind of land’, *kleeren* ‘clothes’, *nee* ‘no’, *scheef* ‘oblique’, *wees* ‘orphan’, *ik weet* ‘I know’, *hij beet* ‘he bit’, and others. Where Hollandish has *ei*, the Zaanstreek dialect equally has *ei*, viz. in *eigen* ‘own’, *reis* ‘journey’, *beitel* ‘chisel’, *spreiden* ‘spread’, *heistere* ‘to make a fuss’, and furthermore in *vleis* ‘meat’ (StDu. *vlees*), *teiken* ‘sign’ (StDu. *teken*). The forms *vleis*, *teiken* and *bleik* are or were common in all of Hollandish.

It is possible that the diphthongization of \*/ɛ:/ to /i.ə/ started before dental consonants (if the medieval evidence can be trusted to reflect the actual distribution in the language) and that *ie* became established in all relevant words by the seventeenth century.

The overall interpretation of these data will depend on our view of the *ei*-words. In Middle Dutch texts from Zealand and Holland, and in particular in works by the authors Melis Stoke, Willem van Hildegaebersberch and Dirc Potter, as well as in some charters, van Loey (1967: 77) assumes that the following words had a real diphthong *ei* in at least some of their tokens: with *i*-mutation factor, *deel* ‘part’, *heil* ‘saviour’, *heim* ‘home’, *scheiden* ‘to separate’, *teken* ‘sign’, *veem* ‘court, company’, *vlees* ‘meat’;

without *i*-mutation factor, *allein* ‘alone’, *ein* ‘one’, *breid* ‘broad’, *eisch* ‘demand’, *gleid* ‘slid’, *leid* ‘went’, *leid* ‘sorrow’, *stein* ‘stone’, *vreise* ‘fear’, *weit* ‘knows’, *zweet* ‘sweat’. He furthermore assumes that this diphthong was autochthonous. Hollandish words such as *vleis*, *teiken*, *bleik*, *deil* have been inherited by the Afrikaans language. Since many of these words never had an *i*-mutation factor, van Loey (1967: 78–82) concludes that Early Middle Dutch *ei* in Flanders and Holland represented an archaic stage in the development of \**ai* via *ei* to “é or é”. The retention of *ei* in coastal Dutch would have been favoured by a following dental consonant and by an *i*-mutation factor. If that is correct, the obvious question arises, why the same phoneme sometimes was retained as *ei*, and sometimes monophthongized to \*/e:/ and then became *ie*, in the same period (Late Middle Dutch), in the same dialects, and in the same phonetic environments (e.g., before nasals and dentals). A different explanation may therefore be preferable.

The raising of \**ai* to /iə/ (in particular before nasals and dentals) reminds one of that of the mid back vowel \*ō to /uə/ or /u/ (before dentals) and to /u/ or /ou/ (before velars and labials), and the two developments may be interlinked. We know that North Hollandish experienced an early raising of old /a:/ and lengthened \**a* in open syllable to <ee>, which probably did not start later than the fourteenth century (Versloot 2012, de Vaan 2012b: 120–1). At the same time, Old Frisian loanwords in /e:/ developed *ie* in their Hollandish form, see §18, and compare Schönfeld & van Loey 1970: 96; de Vaan 2010: 318–20, Versloot 2012. Bremmer (2012: 135) has made a good case for the view that a following *r* could also cause raising of long /e:/ to /i:/, viz. in *vieren* ‘to loosen’, derived from the Early Modern Dutch variant *veer* of *ver* ‘far’, and in the expression (*op een*) *kier* ‘ajar’ (of a door) to *keer* ‘turn’. Another probable instance of the same phenomenon is North Hollandish *gieren* ‘to slant’ (for usual *geeren*), *gier* ‘slanted piece of land’ (first attested at the end of the sixteenth century, Boekenoogen 2004: 142) to StDu. *geir* ‘spear’ < PGm. \*gaizō-.<sup>196</sup> StDu. *wier* ‘seaweed’ < \*waiza- (OE *wār*) probably also belongs here, as it is best explained as a Hollandish development from earlier \**weir* (see § 20.4 for a more elaborate discussion of this etymon).

**Table 46.** Chain shift *aa* > *ee* > *ie*

sources	ODu. *ā ODu. *a + o.s.l., ODu. *a /_r	ODu. *ae, MDu. e /_r, OFri. ē
shift	/a:/	> /e:/, /e:/> /iə/

<sup>196</sup>. For this reason, it is less likely that North Hollandish *gieren* ‘to slant’ is a loanword from Old Frisian, as tentatively suggested by Versloot (2012: 114).

All these individual vowel changes can be viewed as forming a larger chain shift see Table 46: forms with Late Old Dutch or Early Middle Dutch /a:/ were raised to a mid vowel /ɛ:/ or /e:/, and forms with a mid vowel /ɛ:/ or /e:/ in Late Old or Early Middle Dutch were raised to /i.ə/.

This allows us to connect the initial stage \*/e:/, which most \*ai-words must have known in Hollandish, with the dominant monophthongal reflex *ee* of \*ai in Flemish. The entire coastal area may have developed \*ai into \*/e:/, which then shared the raising to *ie* in Hollandish. In Flanders, it remained /e:/ but was pushed back from east to west in a process of lexical diffusion. The relic forms in *ei*, which occur both in Holland and in Flanders, and which have hitherto been regarded as unexplained (van Loon 2014: 214 calls them unexplained, but, on the same page, he says that “de oudere Hollandse [ie]-vormen langzaam zijn verdrongen door *ei*-vormen”),<sup>197</sup> must then be explained by a later development of /e:/ to /ei/ which mainly took place before dental consonants, and which is mirrored by the development of /o:/ to /ou/ before velars and labials. This does not work for *teiken* or other western words with *ei* before labials and velars, such as *heim* and *bleik*.

### 20.3 Dutch *aa*

A number of coastal Dutch words is reported to reflect WGm. \*ai as a long, low vowel /a:/, sometimes shortened to /a/. Gyseling (1962: 12) notes the parallelism with the reflexes of \*ai in Frisian and English, and calls Frisia the “focus” of this monophthongization. Schönfeld & van Loey (1970: 78) likewise suggest that most of these *aa*-words must be regarded as frisianisms. De Vaan (2011a) proposes the following reflexes of stressed \*ai in Old Frisian: long /a:/ <a> before Proto-Frisian \*-u-, \*-wV-, \*-ð- in the next syllable, and before the velar fricatives \*-g- and \*-h-; short /a/ before a tautosyllabic, post-syncope cluster CC; long /æ:/ <e> elsewhere.

In the present section, I will review the alleged evidence for North Hollandish words displaying either the long reflex /a:/ or its shortened counterpart /a/. The shortened forms have also been discussed in de Vaan 2011a: 309–12.

1. *aft* ‘lawful’, a loanword from Old Frisian *äft*, *eft* ‘in accordance with the law; married’ < \*aiwō-xafta- ‘law-ful’ (OHG *ēhaft*). This form occurs as a variant for Standard Dutch *echt* in a number of Middle and Early Modern Dutch rules and stipulations from South and North Holland (*MNW* s.v. *aft*), and in an Amsterdam charter from 1396 (*CRM14*). The adjective mostly occurs in the fixed collocations *afte(n)dach* ‘lawful day for judgements’, *afte(n) claghe(n)*

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<sup>197</sup> “the older Hollandish [ie]-forms have slowly been ousted by *ei*-forms”.

- 'lawful complaint(s)', and *aftenstoel* 'seat of the judge'. The preservation of *aft* can be ascribed to the presence in Holland until the Late Middle Ages of originally Frisian law, based on the jurisdiction by an *asighe*.
2. *asighe, asich, azing* 'officer of the law', to OFri. *ā-sega, -siga, -syga* 'law-sayer' (OS *eosago*). The Old Frisian term was apparently borrowed into Hollandish as /a:sige/, and its etymological opacity facilitated the reinterpretation of apocopated *azich* as *azing*, a form first attested in a document from Kamerik in western Utrecht from 1388. This officer must originally have been known in all of North Holland, including Amstelland, and in Rijnland between Katwijk and Bodegraven (Blok 1963: 255–61). The attestation from Kamerik in 1388 is the easternmost occurrence, and it suggests that the entire area to the west of the river Vecht once had *asega* jurisdiction (cf. Blok 1963: 248). In Rijnland, the institution of *asichdoem* or *aasdōm* 'asegahood', that is, jurisdiction by the *asighe*, lasted until the end of the sixteenth century. Gradually, this system was replaced by the inland system of *schependom*, in which a minion of the law is called *schepen* (MoHG *Schöffe*). Blok 1963 provides a general discussion of Hollandish *aasdōm* in the Late Middle Ages as well as a list of persons featuring as *azige* in Rijnland between 1311 and 1549. For the actual forms of the word, see MNW s.v. *asige* and WNT s.v. *azig*.
  3. *atter* 'pus' and *aterling* 'bastard, poisonous dog' < \**aitra-* 'pus' (StDu. *etter*, MoHG *Eiter*). In *etter*, Old Dutch \*ē- has been shortened to /ɛ-/ before the cluster -tr-, compare *vet fat* < ODu. NOM.ACC.SG. \**fētit*, GEN. \**fettes* from a PGm. past participle \**faitida-* 'fattened' (Kroonen 2013: 124).

The *a(a)-*variants must be regarded as frisianisms because of their vocalism and their geographical distribution. Within Old Frisian, the existence of long /a:/ beside shortened /a/ before CC is well established (Siebs 1901: 1228–31, 1365–67; de Vaan 2011a: 309). The long vowel is continued in the Modern Dutch compound *aterling* 'bastard, poisonous dog', first attested in Junius (1567), a dictionary that gives mainly North Hollandish vocabulary. Kiliaan (1599) also brandishes *aterlinck* as a Hollandish word. *Aterling* also occurs among Hollandish authors from the seventeenth century such Bredero, Hooft, and Vondel, and continues in use until the twentieth century.

It cannot be decided whether coastal Dutch borrowed \**āter* and \**attr-* from Old Frisian or whether the short vowel in *atter* is due to a later, internal shortening in Holland. *Atter* 'pus' is found in literary sources from Holland from the Delft Bible (1477) to the present, as well as in traditional twentieth-century dialects of North Holland. Berns (1981) provides a small map indicating the occurrence of back vowel variants in Dutch and Frisian dialects in the twentieth century. The word occurs as *atter* in North Holland, *otter* in Westerlauwers Frisian (and on Texel and Terschelling; short *a* became *o* in front of a dental

through a recent development, cf. Hoekstra 2001: 724), and *adder* and *atter* in western and eastern Groningen, respectively.

4. Standard Dutch *boot* ‘boat’ reflects PGm. \**baita-*, see § 20.4. Exceptionally, the word is attested in the 1290s in Calais with /a:/, viz. in the plural *baten* (*Quod nullus emat pisces recentes in baten ad opus extranei* ‘that nobody buy fresh fish in boats from a stranger’; Calais, 1293), and in the compound *baetman* ‘ferry-man’ (Calais, 1293), cf. Gysseling & Wyffels 1962: 22–4. Maybe, the word ‘boat’ is also hidden in the surname of *Boid de Bate*, *Boid del Bate*, *Boud de Bate* (Calais, 1295, see Gysseling & Bougard 1963: 15; probably, the same person is referred to as *Boid du Batel* in 1298 and 1299). The absence of *aa*-reflexes of ‘boat’ anywhere else in Dutch is striking. This strengthens the suspicion – hinted at by Gysseling & Wyffels (1962: 15) – that Calais *baat* might be a direct loanword from Old English or Early Middle English *bāt*. Note that French *bateau* is a loan from OE *bāt* with the addition of the Old French suffix – *el*, as seen in the Calais name *du Batel*.

In the 1163 statutes of Nieuwpoort, situated north of Calais on the West Flemish coast, an intriguing form *boiat* occurs twice: *de nave que est clincaboiat* ‘of a ship that is a *klinke-boot*’, probably ‘a riveted boat’, and *de nave que dicitur losboiat* ‘of a ship called *los-boot*’, which may mean either a ship ‘with loose boards’ or a ship ‘to be unloaded’. MNW s.v. *losboord* reads these words as *xclincaboit* and *xlosboirt*, with the word ‘board’. Yet Quak (2014) has a better solution, viz. that *boiat* represents a form of the verb *boeien* ‘to raise the ship’s freeboard with boards’. Compare the combination *omnes cum losa-boinga* ‘all [ships] with a loose raised freeboard’ (1159–64; *Letterswerve Toll*). The parallel toll charter of Margareta of Flanders (1252) has *loseboyngh* instead of *losbo(in)ga*, the simplex is found in MDu. *boeyinghe* ‘raising of the freeboard’. Thus *losboiat* probably represents the weak participle.

5. The word WGm. \**gaiza-* occurs both as ‘spear, pointed weapon’ (OFri. *gēr*) and as ‘slanting or triangular piece of land’ (OFri. *gāra* < \**gaizan-*). The former meaning seems to be primary, as shown by the other Germanic languages and by its presence in Old Germanic compound personal names where it undoubtedly conveys the meaning ‘spear’. The regular development in Dutch is to ODu. *gēr*, MoDu. *geer*. The evidence for *aa*-vocalism is found in two groups of forms: Old Dutch personal names and place-names, and Middle and Modern Dutch appellatives. In the Old Dutch names, including those in coastal Dutch sources, we mostly find <*e*>. Only the *Fontes Egmundenses* sporadically have *Garbrand* for \**Gēr-brand* (Quak 2012a: 87). In view of the location of Egmond in North Holland, this may be a real Old Frisian name, and the same may be assumed for the names *Garburg*, *Garhard*, *Garhelm*, attested on the island of Wieringen between the ninth and the eleventh century. In Late Middle Dutch, some toponyms

are found with a spelling <ae> or <ai>, e.g., 1440 *die Ghaer* (Delft), 1544 *de Gairn* (Zoeterwoude), 1343 *Gaer* (Sint-Pankras). Since lengthened *e* often becomes /a:/ in Holland before a cluster *rC*, and sometimes also before a single *r* (van Loey 1980: 35–6, Weijnen 1976: 235, van Loon 2014: 225–6), these sporadic instances cannot be taken as evidence for frisianisms in Holland.

Several compounds in *geer* ‘speer’ show *aa*-forms in Holland and Zealand. (*N*)*avegaar* ‘auger, large drill’ <*\*naba-gaiza-* (OS *nabugēr*, etc.) is attested with <*e*> in the oldest forms: GEN.SG. *naueghers* (Bruges, 1282), DAT.SG. *naueghe(e)re* (Bruges, 1284, 1291). The first examples with <*a(e)*> are from Holland: *navigaer* (Egmond, 1388), *navegaer*, *navigaer* (*Pelgrimage*, Hol., 1450–1500). In Early Modern Dutch, when initial *n*- is often dropped, *-gaard* is typical for authors from Holland as against *geer* in Flanders and Brabant (see WNT s.v. *avegaar*; WVD II.6a: 238–41, and Boekenoogen 2004 s.v. *sluitauweger*). Kiliaan has *avegher*, but there he refers to *evegher*, *eggher*, which were the Brabantish forms. In modern dialects, the final syllable has been reduced to schwa: North Hollandish *auweger*, *auker* has /-ər/.

Another compound noun in *\*gaiza-* is StDu. *elger* ‘spit, skewer’, MDu. *el-legeer*, *ellegaar*, originally a ‘fork to catch eels’, from *\*æla-* ‘eel’ plus *\*gaiza-*. The meaning ‘eel fork’ is still attested in Middle Dutch and Early Modern Dutch, where *a(e)*-spellings sporadically occur in Holland and Zealand but never in Flanders: *ellegaer* (Brielle, 1445?), Kiliaan *aelgheer*, *elgheer*. Whereas Cats in 1629 still uses *ellegaer*, the WNT attestations after 1650 all have the reduced form *elger*.

The name *Rutg(h)er* from *\*(h)ruodgēr* is attested in 1263 in Bruges as *Roetjar*. In Flanders, <*a*> might reflect a schwa (compare *vlaemscar* in Boekhoute, 13th c.), but in Holland and Zealand, we find <*-aer*> in names in *\*-gēr* in the fourteenth century: *rutgaer die hoetmaker* (Den Haag, 1391), *rutgheer rutghaers soen* (Gouda, 1361) from *\*ruod-gēr*, and *andries rengaers sone* (Zierikzee, 1370) from *\*rein-gēr*. Similar cases are *Reyngaer* (Rotterdam, 1313; Zealand, second half of the 14th c.) and *Noitgaer* (Leiden, 1412), cf. van der Schaar 1953: 176.

The fact that *gaar* reflects *geer* in unstressed syllable reduces its chances of it being a frisianism (pace de Vries 1942: 134). After all, the change to *aa* may be due to the unstressed position of the vowel. A parallel for the latter development can be found in the Middle Dutch forms for *here* ‘lord’ < WGm. *\*xairiran-*. Mooijaart (1992: 120–22) points to the variation between *he(e)re* and *ha(e)re* which occurs in Early Middle Dutch addresses of the type ‘Lord Florence’.<sup>198</sup> In these cases, *a*-vocalism is found in particular in Holland (in 82% of the cases in documents from the Count’s Chancellery, 76% in North Holland, 55% in

198. See also Marynissen 1995: 321–27 for the flexion of this noun.

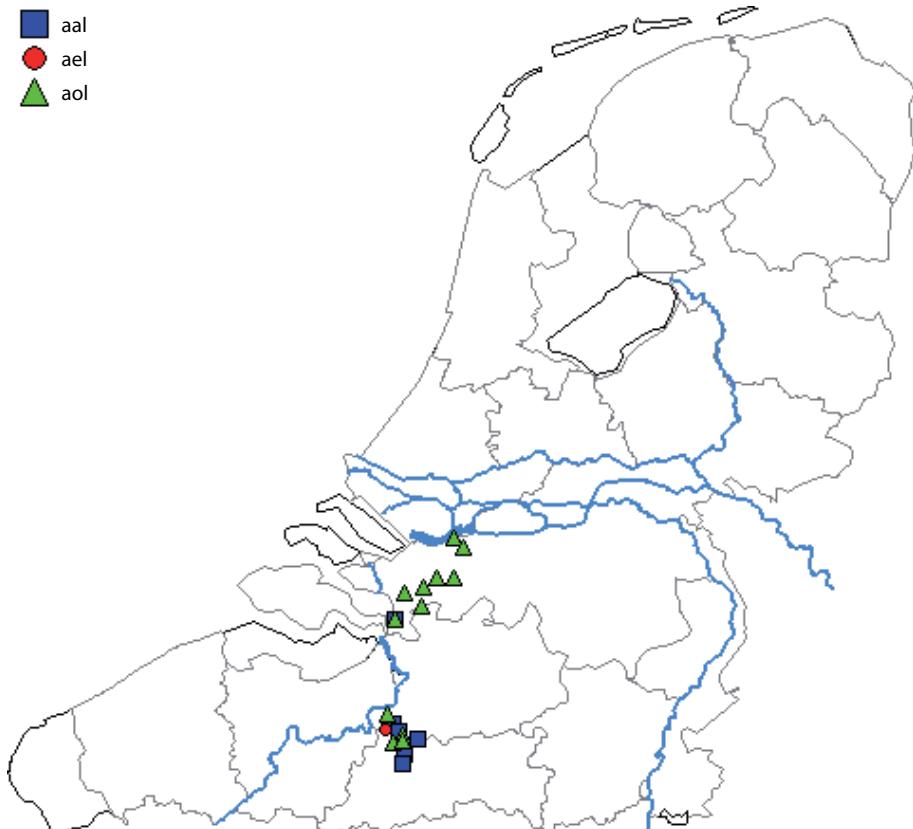
East Holland, 78% in Utrecht), less frequently in Zealand (25%) and North Brabant (21%), and more rarely still in Flanders and other southern dialects. Examples are *pieter sharen tielemans* ‘Pieter of Lord Tielemans’ (Dordrecht, 1285–86) as against *Goswin, sheren sone van Diteren* ‘Goswin, son of the Lord of Dieteren’ (Rijkhoven, Limburg, 1280–90). It is obvious, therefore, that it was the reduced stress of this specific syntactic use of *here* which caused the change to *a(e)*, as Mooijaart infers. She combines this observation with the fact that \**ai* is sometimes reflected as *aa* in coastal dialects (as, allegedly, in *Haamstede*), and she therefore ascribes *hare* ‘lord’ to a combination of an “algemene Ingweoons tendens” (viz. of \**ai* to become *aa*) and “zwakke accentuering” [“weak accentuation”] in this specific context (p. 121). As she notes herself, the virtual absence of *hare*-forms in West Flanders would remain unexplained under this assumption.

To my mind, there is no need to explain these forms as frisianisms or ingvaeonisms. Firstly, it would not account for the occasional presence of *hare* in eastern dialects, such as in Maastricht, Neer (Limburg), Lubbeek/Heverlee and Mechelen (*haren claus van den vliete tspaven*, 1291). Secondly, there is no indication of *hare* ever having been the only variant in Holland. Thirdly, the change to *aa* is also found in unstressed position in Holland in *navegaar*, *ellegaar* and in a few names in -geer. I therefore propose to regard *hare* and the compounds in *gaar* as specifically Hollandish-Zealandish lowerings of the phoneme /ɛ:/ or /ɛə/ (from WGm. \**ai*) in positions with reduced word stress, such as the second member of compounds and appositions in titles.

6. *haal* ‘afterbirth (of a mare)’. TNZN Map 120 shows that the etymon *haal* for ‘afterbirth’ was known on Texel and Wieringen, in the Rijnland (around Leiden), in the Gelderse Vallei, on all the islands of Zealand and South Holland and in adjacent Northwest-Brabant, and in a small Brabantish area west of Mechelen.<sup>199</sup> Texel *éeling* (Jansen 1993: 140) has a suffix *-ing* which is lacking from all other areas. The front vowel found in western Gelderland, viz. /he.əl/ in Barneveld (van Schothorst 1904: 141), contrasts with the low back vowel of the western and southern dialects. The realization in Zealand, South Holland

<sup>199</sup>. The map in TNZN is based on questionnaires from J. Goossens (1957), Meertens Instituut (1961), Nijmegen (1963), Ghent (1978, 1980), and other sporadic sources. This explains why the map ‘De naam voor de nageboorte van het paard’ in Voskuil 1969: 33, which is only based on the 1961 questionnaire from the Meertens Institute, shows *haal* only in Zealand, western North Brabant and southern South Holland, but not in Utrecht/Gelderland or on Texel and Wieringen. Voskuil’s map does – contrary to TNZN – show a few instances of a type *heling*, as well as *haal*, across Fryslân. These must probably be seen as imports from North Holland. Berkhey, *Natuurlyke historie van Holland* 6 and 7 (1807, 1808) mentions *heeling* a number of times for ‘afterbirth of a cow’.

and Brabant may reflect lengthened \**a* or old \**ā*: *haol* /hɔ:l/ in Hoekse Waard (*HWW*), /ɔ:lə/ in North and South Beveland, Tholen, Schouwen-Duiveland, Overflakkee, /æ:lə/ in Walcheren, /æ:lə/ in Goeree (*WZD*), /ɔ:l/ in northwestern Brabant, and /a:l/, /ɔ:l/ and once /æ:l-/ in northwestern Flemish Brabant (*WBD*; see Map 45).<sup>200</sup> For the interpretation of the vowel reflexes, compare the maps *zaal* and *paal* in *FAND II/III*.



Map 45. (*h*)\_l 'afterbirth' as per *WBD*

The etymology of *haal* is disputed. *WNT* and *Weijnen* (2003: 140) suggest an etymological connection with *helen* 'to conceal', since the afterbirth is often referred to as the 'cover' of the foetus. This is certainly possible for southern

<sup>200</sup> *WBD* gives *aol* for Hoogerheide, Moerdijk, Zevenbergschen Hoek, Oud-Gastel, Heerle, Roosendaal, Bosschenhoofd, Etten, Nispen, Hingene, Tisselt, Kapelle-op-den-Bos and Londerzeel; *aal* for Hoogerheide, Liezele, Humbeek, Grimbergen, Kalfort, Breendonk, Hombeek, and *ael* for Lippelo.

and western Dutch: *haal, haol* could continue the feminine noun *hale* ‘secrecy, concealment’ attested in Middle Dutch and Middle Low German, OHG *hala* ‘cover, case, pod’ (*EWAhd IV*: 753). A different solution is introduced by van Haeringen (1936: 63) who stresses the synonymy of ‘healing’ and ‘afterbirth’ in the North Frisian dialects. Föhr *hialing*, Wiedingharde *hjiling*, Mooring *hiiljing*, Karrharde and Goesharde *hiiling* can be reconstructed as Proto-Frisian \**hēlinge* (Löfstedt 1963–65: 305, Sjölin 2006: 81), itself a transparent derivative of \**hēl* ‘whole, healthy’. Van Haeringen sees a semantic parallel in East Frisian *sundels* ‘afterbirth’ to *sund* ‘healthy’.<sup>201</sup> He somewhat rashly concludes that Dutch dialectal *haal* has Ingvaemonic *â < ai*, a conclusion adopted by various subsequent scholars.

In my view, the explanation of the Dutch forms as frisianisms is implausible. The only Dutch forms which seem identical to the North Frisian ones are those from Texel and Wieringen, which have the same suffix *-ing*. This prompts Versloot (2012: 117) to regard Texel *éeling* as a loanword from Old Frisian \**hēlinge*. Yet the absence of the word from attested Westerlauwers Frisian (which has *haam, ham(me)* ‘afterbirth of a mare’ instead) calls for caution. Also, the vowel /ɛ:/ of *éeling* is consistent with the usual Texel reflex of Middle Dutch /a:/, as in *skéep* ‘sheep’ (Heeroma 1935: 36). Texel *éeling* may therefore just be the regular continuation of Hollandish *haal*, to which the suffix *-ing* was added. A strong argument against explaining the other Dutch forms as frisianisms – apart from the lack of the suffix *-ing* – is that they are also found in western Gelderland and southwestern Brabant, which is too far east.

It is difficult to accept for Dutch *haal* an etymological explanation from WGm. \**xalō-* ‘cover’, since the vocalism of the Brabantish dialects (where ‘afterbirth’ has either \**a* with open syllable lengthening or \**æ* without *i*-mutation) does not match that of Gelderland/Utrecht (which may reflect \**e* or \**ä* with open syllable lengthening; *i*-mutation of \**æ*; maybe \**ai*). One option is to stick to \**xalō-* ‘cover’, and to explain the Gelderland/Utrecht vocalism as deriving analogically from the verb *helen*. The semantic side of this etymology can be supported by the occasional occurrence – on Voorne-Putten – of the heteronym *helm* ‘helmet’, which is also used for the membranes surrounding a child at birth. Another possibility would be to posit a derivative \**xanxalō-* or \**xanxitlō-* ‘instrument for hanging’ to the verb \**xanxan-* ‘to hang’. This noun is attested as ‘pothook’ in OHG m. *hāhal* and f. *hāhala* (in glosses, *EWAhd IV*: 744), OS m. *hāhal*, MLG *hāl*, MDu. *hael*, MoDu. *haal*, MoHG f. *Hahl, Hähl*. Kroonen

<sup>201</sup> Within the Dutch dialects, compare the derivation of ‘afterbirth’ from *genesen* ‘to cure’ in Drente/North Overijssel and East Betuwe. ‘Afterbirth’ is derived from ‘to cleanse’ in Flanders and East Limburg.

(2013: 209) reconstructs PGm. \**xanxilō-* F,<sup>202</sup> beside which – if we take the Low German evidence seriously – \**xanxalō-* must have existed,<sup>203</sup> as well as *a*-stem variants. The original meaning was ‘hinge, handle’, which has the Verner variant *hangel* (e.g. Plantin, *hael oft hangel*). Connecting ‘afterbirth’ to these words implies that ‘hinge’ shifted its meaning to ‘what is hung up’.<sup>204</sup> This would have a clear motive: the afterbirth was often hung from a tree, in order to beg for the foal’s good health and for other reasons. See Voskuil 1959 and 1969 for the spread and the background of this custom.

7. MDu. *heesch*, MoDu. *hees* ‘hoarse’ reflect PGm. \**xais(is)ka-*, a by-form of \**xaisa-* (OHG *heis*, OE *hās*). Other Germanic variants were \**xaisra-* (OHG *heisar*) and \**xairsa-* (ON *háss*, E. *hoarse*), the latter with metathesis of \*sr to rs (Kroonen 2013: 202). Some Dutch forms end in -rsch, e.g. Early Modern Flemish *heersch*; this would suggest \**xairska-*, unless <sch> is a hypercorrect spelling for <s> in all these forms. In the fifteenth and early sixteenth century, a number of Hollandish tokens have /a:/ -vocalism: *mijn kele is haesche gheworden* ‘my throat has become hoarse’ (early 15th c.; MNW), *haersch* Holl. (Kiliaan, 1599), *haars* (Biestkens, 1619). Compare, from modern dialects, *haars* (Opprel 1896) or *hoa(r)s* (HWW) in Hoekse Waard, *haasten* (< \**haarsten*) ‘to be hoarse’ in Zaanstreek (Boekenoogen 2004), *hós* ‘hoarse’ on Texel (Jansen 1993), *haers* /hæ:rs/ on Goeree (WZD). In Zealand, *aes* /æ:s/ with MDu. \*/a:/ is found on Schouwen-Duiveland and in eastern Zeeuws Flanders (WZD), but êê-vocalism occurs everywhere else.

The various Frisian dialect forms for ‘hoarse’ (Schiermonnikoog *haiz*, Hindeloopen /hɔ:s/, MoWF *heas*, FÖ *huask*, Mooring *hüusk*) point to OFri. \**hās(k)* (Spenter 1968: 180, Sjölin 2006: 86, WFT s.v. *heas*). EWN explains the coastal Dutch *aa*-vocalism with reference to OFri. *hās*, which is unlikely because the *r*-variant is lacking in Frisian. The alternative is quite straightforward: the long vowel of Old Dutch \**hērs(k)* was shortened to \**hers(k)* in Early Middle Dutch, and then shared the lowering and lengthening of *e* to *aa* before *r* plus a dental obstruent which is typical of Holland (van Loey 1980: 35, FAND), as in *kaars* ‘candle’ < *kerse*, *paars* ‘purple’ < MDu. *perse*, *vaars* ‘heifer’ < MDu. *verse*, to mention only a few examples with a following *s*.

202. *I*-mutation is confirmed e.g. by the dialect of Bree (in northern Belgian Limburg) *hīil-hōk* ‘fishing rod, pothook, chimney crook’ < \**hāhil-* < \**xanxil-*, see Dupont 1922: 63.

203. Or, alternatively, the unmutated vowel was restored from the verb \**xanxan* > MDu. *haen* ‘to hang’.

204. Another alternative is to regard *haal* as a productive deverbal adjective in -el with the meaning ‘hanging’, in view of the productivity of -el in Middle Dutch (Schönenfeld & van Loey 1970: 203–204). This view is better suited to explain why we have both *hael* and *hangel* for ‘pothook’.

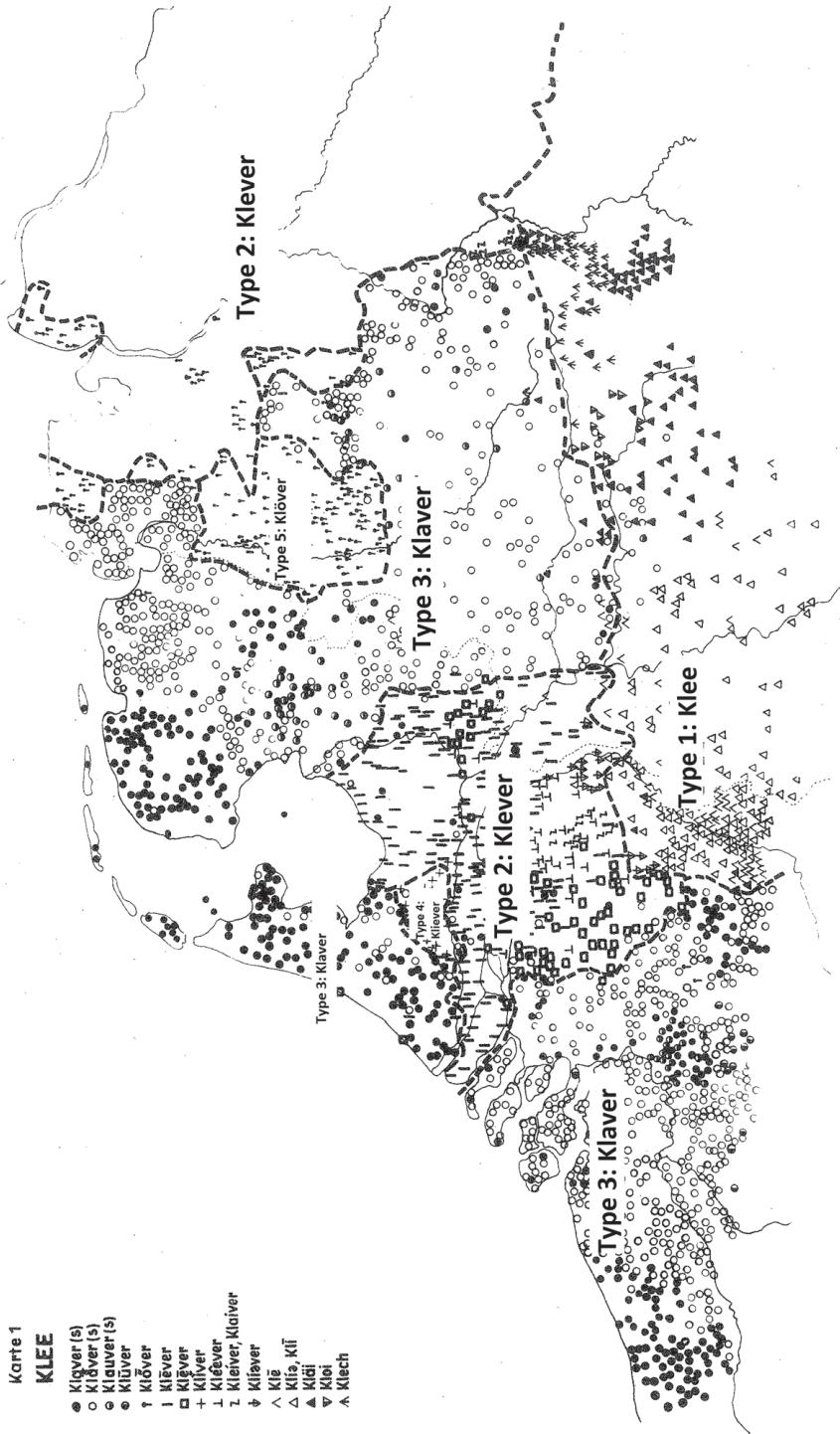
8. The word *\*xaima-* ‘house, home’ (OFri. *hēm*). From the Ghent personal names between 1000 and 1253, Tavernier-Vereecken (1968: 571–3) mentions no *a*-spellings for *\*ai*. The toponyms in *-ham* from *\*-haim* ‘home’, e.g. *ernigaham* ‘Eernegem’ (1084 copy 1141) in West Flanders, and in particular several instances in Nord and Pas-de-Calais, are explained by Gysseling (1962: 12) as written by Romance-speaking scribes, in which case they would be irrelevant. Alternatively, *-ham* could be interpreted as rendering an already unstressed *\*ai* as <a>, compare nrs. 5 and 13.

The place *Haamstede* on Schouwen (Zealand) is first attested in the thirteenth century as *Hamstede* (Utrecht, 1296) and *Hamestede* (WHol., 1299). It has been interpreted as *\*haima-stadi-*, compare *Heemstede* in South Holland (*Hemstede* in the 12th c.). The fact that Old Frisian only has vocalization of *\*xaima-* to *hēm* and never to *hām* already casts grave doubts on the explanation of *Haamstede* as a frisianism. The first *e* of the attestation *Hamestede* would also be unexpected. There is an alternative explanation for *Haamstede*. VMNW points to a single occurrence of a toponymical reference *in den haem* in a Ghent document from 1270. The dictionary hesitantly explains it as a lengthened variant of *ham* ‘headland in marshy land’, which is usually MDu. *hamme* with a short vowel. The latter has developed as ‘land in the curve of a river’ from a more general meaning ‘curve, bay’, which itself is metaphorical from ‘back of the knee’. Indeed, as appellatives, Early Middle Dutch has *hame* ‘back of the knee’ beside *hamme* ‘shank, ham’. Kroonen (2013: 207) reconstructs the corresponding Proto-Germanic noun as *\*xam(m)ō-* f. ‘shank’, with variants with single *\*m* and geminate *\*mm* in the Germanic languages. Hence, *Hamestede* could belong to the toponyms in *ham* and contain *hame* ‘curve’ or ‘headland’. The disadvantage of this approach is that *ham* usually occurs as a second member of compound names. It will be up to historical geographers to determine whether this is a decisive argument against the proposed etymology.

9. *klaver* ‘clover’ < WGm. *\*klāwr-* (MLG *klēver*, *kläveren*; OE *clāfre*, *clābre* beside *clāfre*, *clāfra*, ME *claver*). The word competed with *\*klaiwa-*, as reflected in OHG *kléo*, OS *klē*, GEN.SG. *klēwes*, MoHG *Klee*. The earliest attested forms are MDu. *clauere* ‘klaver’ (WFla. gloss., 1226–50) and *clavere* (Fla., 1351). From the sixteenth century onwards, the word is better attested. The usual literary form in all western Dutch is *klaver(en)*. The modern dialectal distribution is given in TNZN, maps 2.5 and 3.11, and in PLAND s.v. *klaver*. Van den Berg 1954 and Foerste 1954 have simultaneously tackled the dialectal distribution in Low German and Dutch. Map 46 reproduces Foerste’s map, to which I have added a name for each of the main geographical-etymological areas which can be discerned and which are separated by the dotted lines. The legenda: Type 1 = *klee*, 2 = *klēver*, 3 = *kläver*, 4 = *kliver*, 5 = *klöver*.

In the southeast of the Low Countries, in Ripuarian and in southern Westphalian, the type *klee* < \**klaiwa-* is dominant. The areas 2 to 5 all have the *r*-suffix. The form *klēver* of the large Low German type 2-area contains \**ai* (Foerste 1954: 399), and seems to continue the same preform as OE *clāfre*. In the Netherlands, however, not all dialects in the North Brabant-Gelder s-South-Hollandish *klēver*-area continue the same Germanic vowel. Foerste argues that the majority of the Dutch *klēver*-dialects have \**ai*, in agreement with type 2 in Low German. In North Brabant and North Limburg, however, the vocalism presupposes *i*-mutation of \**ǣ*. In Foerste's view, this vocalism would be due to reinterpretation of *klēver* as the plural of the singular *klāver* which occurs in western and southern Brabant (type 3). The other main deviation within western type 2, viz. *klēver* on Voorne-Putten, has open syllabe lengthening of \**e*, which Foerste ascribes to contamination, maybe with *klever*(*boom*) 'ivy'. The /i:/ in type 4 *kliever* (in the province of Utrecht) would be due to folk etymology with the verb *klieven* 'to cleave', invoked by the 'cloven' leaves of the plant. The vocalism in the type 3 *klāver*-area is interpreted by Foerste in the sense that the original vowel in this area was WGm. \**ǣ*, which left traces as /e:/ here and there, but is mostly found with the standardized, southern-central vowel /a:/. Apparently, the Standard Dutch form has ousted the local dialect forms in many Hollandish dialects in recent centuries. In the South Drente/Overijssel/ Westphalian type 3 *klāver*-area, the vocalism can only reflect \**ǣ*. In area 5, the vowel was rounded secondarily from /e:/, maybe again as a plural form.

The etymological upshot of this survey is that \**klaiw-* in area 1 and \**klaibr-* in areas 2 and 5 continue a different vowel than \**klēbr-* in area 3. Foerste (1954: 405) deduces that West Germanic had two variants, \**klaibr-* and \**klēbr-*, which he sees paralleled in OE *clāfre* next to *clæfre*. He goes on to list other West Germanic words which seem to show a vocalic alternation between \**ai* and \**ǣ* (such as the word for 'starling', on which see below), leaving the ultimate explanation of this variation to Indo-European linguistics (p. 408). Foerste argues convincingly that the most likely root connection is with the verb \**klib-* 'to stick, glue' and the noun OHG *klīwa*, MoHG *Kleie* 'bran' < \**klīwō-*, which are cognate with \**klajja-* 'clay'. According to Foerste, clover is a 'sticky' plant in the sense that it attaches itself firmly to the soil and quickly spreads: "das Benennungsmotiv im Westgermanischen [war] der oberirdisch kriechende, an den Knoten wurzelnde ('klebende') Hauptstengel, der ein strahlenförmiges Netz von Zweigtrieben aussendet und in einem Jahr mehrere Quadratmeter bedecken kann" (p. 410). Liberman (2008: 26–31) rightly objects to this reasoning that it hardly justifies the use of the word 'to stick'. Instead, Liberman returns to an earlier idea, viz. that it was the thick juice of the clover which caused the comparison with 'sticky'. The juice of the clover was used for sweetening, as is shown by the alternative



Map 46. Klaver according to Foerste 1954

name *honeysuckle* in English, and also, for instance, by Kilian's (1599) *klaueren honigh*, which he glosses as 'the best and sweetest honey'.

In the same year that Foerste's article was published, van den Berg's comment on the TNZN maps for 'clover' appeared. Its main novelty was the theory that the Dutch *v* had arisen from \**w* before *r*. A change of the reverse sequence *rw* to *rv* is well known from many Dutch dialects, e.g., in *tarwe* 'wheat' in Limburg, Brabant and many western dialects (*FAND* IV, Map 199) and in *erwt* 'pea' in Drente, Overijssel and Achterhoek (*FAND* IV, Map 198). Also, Standard Dutch always shows fortition of *w*- to *v*- before *r*, and often of -*rw*- to -*rv*- too (*wringen* 'to pinch', *verf* 'colour', etc.). For Dutch, then, a development from \**klaiwr-* to \**klaivr-* is not very problematic, even though the change was apparently earlier and more pervasive in 'clover' than in other lexemes.

The original Proto-Germanic paradigm would have been an *s*-stem, with rhotacism of \**z* to *r* in the oblique cases: NOM.ACC.SG. \**klVwaz*, PL. \**klVwezō* > \**klVwiru*. Foerste (1954: 396) objects to this explanation because Old English did not know such a shift of *w* to *v*, nor does most of Low German. Hence, Foerste retains two different West Germanic stem forms. Foerste's view is adopted by Schönfeld & van Loey (1970: 78).

Recently, Liberman (2008: 26–31) and Kroonen (2013: 290–1) have returned to van den Berg's hypothesis, and rightly so. The similarities between the two stems \**klaiw-* and \**klaibr-* are too striking to be coincidental. Commenting on English, Liberman argues that original \*-*wr-* may have become -*fr-* in Old English because word-internal *wr* was a rare sequence in the language. Kroonen reconstructs an *s*-stem paradigm with a NOM.ACC.SG. \**klaiwaz* (which would have yielded type 1 \**klaiwa-* by a trivial shift to *a*-stem inflection), and a plural \**klaiwizō-*. In order to explain Dutch -*vr-* and Old English -*fr-*, Kroonen tentatively proposes that "the original paradigm \**klaiwaz*, \**klaiwizaz* may have given rise to a syncopated stem \**klaiwz-*, in which the sequence -*wz-* developed into \*-*bz-*". I think that these explanations are complementary. The only road to a phonetic explanation runs via internal syncope, which made \**w* and \**z* adjacent sounds. But as far as I can see, \*-*wz-* was not a possible intervocalic cluster in West Germanic. In other words, \*-*aiwza-* would normally be realized as [-ajuza-]. In order to retain the stem identity as \**klaiw-*, restoration of the final \**w* may automatically have led to realization as its closest look-alike in phonemic terms, viz. WGm. \**b* [β]. This may be the origin of the alternation between \**klaiw-* and \**klaibr-*.

Kroonen does not express an opinion on the vocalic alternation between \**ai* and \**æ*. Here, as in the word for 'starling',<sup>205</sup> the low monophthong is found

<sup>205</sup>. This parallel was given by Foerste (1954: 407). The other alleged parallels for \**ai* : \**æ* which he gives are irrelevant: G. *Ameise* has original \**æ-*, the dialectal *ai*-forms being recent; Early

in western and northern Dutch, which has led to the theory that Dutch /a:/ is Ingvaeanic, as per Van Haeringen (1936: 203). This was refuted by Foerste (1954: 405), who regards the eastward distribution of *klaver* as incompatible with such a view, but it has been reintroduced by Schönfeld & van Loey and was recently adopted by EWN, who call the /a:/ "Noordzee-Germaans". Schrijver (1997: 305) interprets the vocalic alternation in 'clover' as a sign of substrate origin. I think that, as in the case of *wr* versus *br*, it is preferable to assume that the alternation between \**klaibr-* and \**klæbr-* goes back to one single original variant. In view of \**klaiwa-* and its clear semantic connection to other words with a root \**klai-* meaning 'to stick, sticky', such as \**klajja-* 'clay', the original vowel can only be \**ai*. It follows that \**klaiw-z-* first became \**klaewr-*, with the regular, lowered variant [ae] of the diphthong \**ai* before *r*, *h*, (*h*)*w*, before becoming \**klæbr-* as sketched above. In \**klaiw-(a)z-*, the diphthong is expected to yield \*/ɛ:/, but once the \**w* had become a fricative, the sequence \*/ɛ:β/ would have been unique in the language. Maybe this was the reason why the vowel was reinterpreted as /æ:/ and shared the further development of long *aa*.

10. *ladder* 'ladder' < \**xlaindrō-*. The dialectal distribution of *ladder* at the beginning of the twentieth century is shown by TNZN Map 1.4, where we find *ladder* in North Holland (*lodder* on Texel), the western part of South Holland, and in the whole of Zealand. The remainder of the Dutch area has the expected *ee* or *ei*: *leer(e)*, *ledder*, *leier*, etc. The border between the types *ladder* and *leere* in Flanders is, in the twentieth century, identical to the state border between the Netherlands and Belgium, which suggests that *ladder* may have been known in West Flanders in previous centuries. Nonetheless, this distribution does not seem to have changed significantly since the Late Middle Dutch period, judging by the attestations from Middle and Early Modern Dutch (van den Berg 1938: 15–7, 45–50). There is one exception to this continuity, however: a few Middle Dutch attestations point to a long vowel /a:/: Middelburg (1364–65) *ladren*, Geervliet (ca. 1525) *laderen*, *laeder*. This /a:/ has subsequently disappeared from the dialects, but its previous existence means that we cannot be sure whether coastal Dutch borrowed an alternating paradigm with PFri. \**hlād(V)r-* vs. \**hladr-*, or only forms with \**ā*. In any case, the word was borrowed before the raising of Late OWFri. /a:/ to /ɛ:/ started. In Fryslân, the modern dialects have *ledder*, *ljedder*, *ljerre* or *leider* (Hof 1933: 162), which means that coastal Dutch *ladder* cannot be due to recent influence from Frisian.

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Modern Dutch-Westphalian-Ripuarian *amer* 'embers' for \**aima-uzjōn-* can be due to contamination with \**ēmōn* 'erysipelas' (Kroonen 2013: 117); the verbs 'go' and 'stand' can be explained from their innerparadigmatic alternations in Proto-Germanic.

11. *van lieverlede* ‘gradually, bit by bit’ (VMNW s.v. *lieuerlade*, MNW s.v. *lade*, WNT s.v. *lieverlede*). The expression can be analysed as consisting of a preposition plus the feminine of the adjective *lief* ‘dear’ and the noun *lade*, MoDu. *lede*. In Middle Dutch, the expression *bi lieuerlade* ‘slowly, calmly’ first occurs six times in Bruges charters (1284, 1285). *Bi liever lade* and *met liever lade* are subsequently found in various other literary texts from Flanders, and in Melis Stoke’s chronicle of Holland. A variant is *met lichter lade*. The Hollandish literary texts of the early seventeenth century already have *met liever lee* and *van liever lee*, nearly exclusively with *ee*-vocalism. In dialects, however, *van lieverlaad* was retained, for instance, in the Zaanstreek (Boekenoogen 2004: 301).

The dictionaries have different explanations for the form *lade*. MNW interprets it as ‘load’, whereas later dictionaries compare OE *lād* ‘road’ < \**laidō* ‘journey’. The latter would give Dutch *leede* but OFri. \**lāda*. This explanation, given by WNT in 1918, was already rejected by Franck & van Wijk (1912), but re-established by van Haeringen (1936) in the supplement to the etymological dictionary. Schönfeld & van Loey (1970: 78) more or less adopt van Haeringen’s explanation. If correct, it would mean that *bi lieuerlade* meant literally ‘with a pleasant course’ (thus EWN), whence ‘easily’. But Franck & van Wijk object to this view on the basis of the early attestation of *lade* in West Flanders. We may add that the semantic motivation for the use of *lief* ‘dear’ in combination with a word for ‘road’ is not evident. I would therefore like to propose an alternative etymology.

In Middle Dutch, *laden* means ‘to summon’, and *ladinge* ‘a summons’. These juridical terms go back to PGm. \**lapōjan-* ‘to invite’ (OHG *ladōn*, OS *lathian*, see Kroonen 2013: 328) and \**lapō-* f. ‘invitation’ (> Goth. *lapo*, ON *lǫð* f.). The latter noun would yield the exact form *lade* found in the oldest Middle Dutch texts – where *lede* is never found. The metaphoric use of *bi liever lade* ‘with a friendly summons’ as ‘calmly’ seems unproblematic, and can easily be understood from the disappearance of the simplex *lade* ‘summons’ from the living vocabulary. The replacement of *-lade* by *-lede* is problematic under any theory. Probably the most educated guess is given by EWN, who propose that *lade* was replaced by MDu. *lede* f., MoDu. *leed* ‘grief’ under the influence of the fixed, antonymic combination *lieve ende lede*, later *lief en leed (delen)* ‘(to share) happiness and sorrow’.

12. *schapraai* ‘cupboard’ (OHG *scafreita*, MHG *schafreite*), a compound from \**skapa-* ‘pot, vase’ and \**raidiō-* ‘row’. Most of the Middle Dutch forms hail from West Flanders, Zealand, and Holland, and have *a*-vocalism in the second syllable: *scaperade* (Ghent, 1376, 1377 CRM14; Damme, 1382–83), *scapraden* (Ghent, 1321–22), cf. Jacobs 1911: 180. The *a*-vocalism is explained as an Ingvaeanic reflex of \**ai* by Schönfeld & van Loey (1970: 78) and by the

etymological dictionaries. We find *scaprede* in *Vocabularius Copiosus*, and Kiliaan has *schapraede* next to *schapreede*. Middle Dutch *schapreel* ‘cupboard’ (e.g. *scaperelen*, ’s-Hertogenbosch, 1378) is regarded as a novel suffixation to earlier *schaprede*, which would also presuppose the existence of the *ee*-form. In Early Modern Dutch, only *aa*-vocalism appears, in *schapraai* (Brabantish), *schapraat* (North Holland), *schapra* (Holland). In modern dialects, the word occurs as ‘pantry’ in all of Flemish (WVD) and in various other southern dialects, but not in Zealand or Holland. This distribution seems to reflect the recent spread of the Flemish and West Brabantish variant *schapraai* across southern Dutch.

Presently, the second syllable is stressed, but, originally (in Middle Dutch), *-rede* and *-rade* must have been in unstressed position. Hence, we must allow for the possibility, as with *-gaar* < *-geer*, that *-rade* is due to a development of (\**ai*) *ee* in unstressed syllable.

13. *schout* ‘sheriff, bailiff’ < \**skuldi-haitjan-* ‘who calls for duty’ (OS *skuldhētio*, OHG *schuldheizo*, MoHG *Schultheiß*, *Schulze*, Langobardic *sculdahis*, *sculd-hais*, Easterlauwers OFri. *skeltata*, *skelta*, Westerlauwers OFri. *skolta*, *skulta*, OE *scyldhāta*, *scultheta*). The modern form *schout* has arisen through *l*-vocalization and the reduction of the second member of the compound: ODu. \**skolthēti* in Latinized *scultetus* (1105) > Late ODu. *sc(h)outhēte* > Early MDu. *schou-tete* > *schoutte* > *schoute* (this stage was reached already at the end of the thirteenth century) > MoDu. *schout* (EWN). One of the Middle Dutch by-forms is *schouthate*, the <*a*> of which is regarded as an *ingvaeonism* by Schönfeld & van Loey (1970: 78), that is, as the Frisian reflex /a:/ of WGm. \**ai*. However, the *a*-forms are restricted to a few occurrences in Zealand and northern Flanders in the thirteenth century (Zierikzee, Saaftinge, Axel, Assenede). They are dwarfed by the usual <*e*>-spellings in the suffix in the same region. In the fourteenth century, *scoutate* is found in Dordrecht, Zierikzee, Middelburg and Aardenburg (CRM14), next to *scoutete*. Occasional *-ate* is best regarded as another instance of the reduction of \**ai* in unstressed syllable to /a(:)/.
14. *spaak* ‘spoke’, allegedly from \**spaikōn-* f. (whence OS *spēka*, MLG *speke*, also *spake*, OHG *speihha*, Eastern OFri. *nigunspētze*, *nigunspätze* ‘with nine spokes’ [< \*-*spaika-*], MoWF *speakē*, OE *spāca*). All the older Dutch attestations have <*e*>: Early MDu. *speeken* ‘spokes’ (Dordrecht, 1285–86), *speeghen* (Bruges, 1350–85; MNW s.v. *schamel II*), also more generally ‘beam attached to an axis, screw jack’, e.g. *moederspeeke ende cleine speeken* ‘winch and small spokes’ (1432–68; MNW). The earliest <*a*>-forms are found in the sixteenth century and also refer to larger beams: *spaeck* ‘winch’ (1567; *Nomenclator*), *speecke*, *spaecke* ‘winch’ (1588). *Spaak* becomes the general literary form from the seventeenth century.

The word for ‘spoke’ was not counted as a frisianism by Schönfeld & van Loey (1970: 78) or by the preceding dictionaries, but EWN claims that the /a:/ of *spaak* is a North-Sea Germanic development of \*ai. There is a homonym *spaak* in Dutch, which derives from WGm. \*spakō- and means ‘twig, branch, stake’: Early MoDu. *spaecke* ‘bar, stake’, OHG *spahha* f., *spahho* m. ‘osiers, twigs’, MLG *spāke* f. ‘spoke of a wheel’, *spāken* PL. also ‘dry wood’, OE *spæc* ‘twig(s)’. It probably goes back to an original meaning ‘dry wood’, compare MDu. *spak* ‘dry, arid’, *verspaken* ‘to dry out’. Franck & van Wijk (1912) argue that *spake* ‘bar, stake’ interfered with the meaning *speeke* ‘spoke of a wheel’, *spaak* becoming the word for ‘spoke’ in Standard Dutch, though *speek* was retained in many dialects. The correctness of this scenario is clear from the distribution of ‘spoke’ as given in MAND: *ee*-vocalism from \*ai is found, by and large, in most of Flanders of Zealand, in traditional dialects of South Holland, in Limburg and in Gelderland and Overijssel, whereas *aa*-vocalism is continued in eastern East Flanders, large parts of Brabant, South and North Holland, Utrecht, western Overijssel and Groningen. This distribution does not make sense in terms of the phonetic history of the dialects or of possible paradigmatic alternations within \*spai-kōn- or \*spakō-. It rather looks like a classic case of semantic disambiguation of two words which are closely similar in form and meaning. Some dialects have retained the \*ai-etymon for the meaning ‘spoke in a wheel’, whereas in others, the \*a-etymon of ‘twig, bar, stake’ has been adopted in the meaning ‘spoke’ as well. It is the latter ones that have furnished the standard word *spaak* ‘spoke’. EWN objects to this explanation, because spokes of a wheel must be made of strong wood, and are therefore unlikely to derive from a word meaning ‘dry wood, small twig’. But we do not have to assume a straight metaphor from ‘small, dry twig’ to ‘spoke’, since Early MoDu. *spaeck* can also refer to a large beam or a winch – as it still does in miller’s terminology. For *spaak*, we must in any case assume the shift from ‘small, dry twig’ to ‘larger beam’, and the slightly different shift from ‘twig’ to ‘not so large, but strong, round bar’ = ‘spoke’ is unobjectionable. Since the *ee*-forms for ‘spoke’ are found in coastal dialects from the thirteenth century, whereas *aa*-forms do not appear before the sixteenth century, this explanation for *spaak* ‘spoke’ is to be preferred over one that relies on contact with Frisian.

15. *spreeuw* ‘starling’ from \*spraiwōn- (MDu. *sprewe*) beside *spraan(n)* (MDu. *spra* once in *Teuthonista* from 1477, glossed as ‘a bird, thrush’) from \*spræōn- (OHG *sprāa*, *sprēa*, MoHG *Sprehe*). In modern dialects, *spreeuw* is generally found in Holland, Flanders and Brabant, and in West and South Limburg (WVD, WBD, WLD). The dialectal variants in Brabant (*spriew*, *sprief*, *spruw*, *sprjow*) confirm the etymology with \*ai. The variant *spraan(n)*, *spraon* is found in the eastern Netherlands, from southeast Limburg to Groningen. The *spraan*-area

continues into Germany, where most of Ripuarian and Moselle Franconian have a corresponding variant (*RhWb*).

*Spra(n)* reflects a West Germanic preform \*sprē-ōn- ‘the speckled one’, derived from the verb \*sprē-an- ‘to spray’ (MHG *spræjen*, *spræwen*, MDu. *spreuen*, *spraien*, Early MoDu. *spraaien* ‘to spray’). Because of the speckled feathers of the starling, ‘speckle’ or ‘speckled’ is a frequent naming motive for the bird, compare E. *star-ling*. The restriction of \*spraiwōn- to Dutch suggests that it is of more recent origin than \*sprēōn-. Since \*ai can represent a secondary sequence of \*ā plus \*j, as in Du. *blein* ‘blister’, derived from *blaaien* ‘to blow’, \*spraiwōn- may be a derivative in \*-wōn- from the stem variant \*sprējan (> *spraaien*) of the verb. That is, \*sprēj-wōn- became \*spraiwōn-.

This explanation obviates the need to invoke expressivity (thus *NEW*) or different dialects. Schrijver (1997: 304) had proposed that “\*sprāw- (...) may ultimately reflect the Ingvaeanic treatment of \*spraiw-”, but the geographic distribution of the ā-vocalism in eastern Dutch and \*ai in western Dutch contradicts this suggestion.

16. *taling* ‘teal, small species of duck’. Cognate with ME *tēl*, MoE *teal*, and Early MoWF *teling* (1555), *teeling* (1614), cf. Buma 1974: 91–2. Groningen and East Frisian (Low German) have *teelink* and *taolng* (Spenter 1975: 237). Middle Dutch has /a:/ in Holland, viz. in *taeling* (Hol., 1377–78), *taling* (Leiden, 1471), though Junius in his *Nomenclator* (1567) calls *teeling* Hollandish, too. In the course of the seventeenth century, *teeling* is replaced in the standard language by *taling*. Boekenoogen 2004 has *taling*, with an occasional variant *teling*, also as a family name *Teeling*, which mainly occurs in northern Kennemerland. Wieringen had *telink* (Daan 1950: 16, 152) and Texel *tjilling* (Keyser 1951: 201). MoWF *tjilling* reflects OFri. \*tēlinge, see Buma 1974: 91–3.

Most etymological dictionaries of Dutch and Germanic have assumed a preform \*tail- which developed into OFri. \*tāl- or \*tēl- and was then borrowed into coastal Dutch as a frisianism. Buma (1974) still defends this explanation. However, there is no evidence that Old Frisian ever possessed a form \*tāling, which makes Hollandish /a:/ difficult to explain. The North Hollandish form *teling* can be due to the local raising of MDu. /a:/ to /e:/. Versloot (2012: 117) assigns Hollandish /a:/ for \*ai to an Ingvaeanic substrate, though he duly notes that the vowel /a:/ does not correspond with the \*/e:/ which we need for Old Frisian. Since the extant forms of English, Frisian and Hollandish can all be explained on the basis of a West Germanic preform \*tēli-, Spenter 1975 is justified in rejecting the reconstruction \*tailing-.

17. *vracht* ‘load, freight’ < \*fra-aixti- ‘reward, rate, fare’ (OHG *frēht* ‘reward, recompense’), see de Vaan 2011a: 311–12. We find the expected Franconian front vowel \*ē shortened to /ɛ/ in the Flemish form *vrecht*. The form *vracht* is found

in a much larger area than other words with *a* from earlier \*ā (*aft, atter, ladder*). For instance, *vracht* is completely normal to the lexicographer Kilian (1599) and it is already found in Middle Low German. The only explanation I see for this remarkable spread is its use by Frisians and Hollanders as a commercial term in long-distance trade.

18. *zwaag* ‘pasture’ as an appellative (e.g. *inden zwaech* 1465, *in die swage* 1544) and in the toponym *Zwaag* (ca. 1312 *Svaech*, 1336 *Swachdijc*, 1396 *Zwaech*; van Berkel & Samplonius 2006: 528) in North Holland is a clear borrowing from Old Frisian \*swāga < WGm. \*swaigō- (OHG *sweiga* ‘cow’s pasture’, ODu. gloss *sueiga* ‘herd’). It is found in Frisian toponyms such as *Beetsterzwaag* (1315 *Suagh*, 1504 *Beexterswage*), compare OWFri. *swāger* ‘inhabitant of Kollumerzwaag’ (Gildemacher 2007: 36, Hofmann & Popkema 2008).

## Summary

The evidence discussed above falls into the following categories:

### Frisianisms:

- Frisianisms in Holland, sometimes also Zealand, which appear to have been transferred from Old Frisian to Old Franconian at the latest before the francoization of South Holland around 1100: 1. *aft*, 2. *asighe*, 3. *atter*, *aterling*, 10. *ladder*, 17. *vracht*.
- Local borrowing from Old Frisian in North Holland: 18. *zwaag*.

### Not Frisianisms:

- *aa* arose by internal phonetic development from \*ai within Hollandish: 5. toponym *Gaar* in Holland, 5. -*gaar* in unstressed syllable in Holland (*navegaard*, *ellegaar*, *Rutgaer*), 7. *haa(r)s* ‘hoarse’, 12. *schapraai*, 13. *scoutate*.
- Loanword from Old English (?): 4. *baat*.
- Etymology with \*ai which gave aa internally in Franconian under specific conditions: 9. *klaver*.
- Etymology without \*ai: 6. *haal*, 8. *Haamstede*, *in den haem*, 11. *lieverlade*, 14. *spaak*, 15. *spraan* ‘starling’, 16. *taling*.

It follows that the frisianisms are restricted to Zealand and Holland (with the exception of *vracht*, which became more wide-spread). The terms *aft*, *asighe* and *vracht* are closely related to the juridical and economical system of medieval Frisia, and were borrowed as part of that jargon. *Zwaag* is a term of local toponymy. Only *atter* and *ladder* belong to the unmarked vocabulary, although there may have been a technical connotation to *ladder* which escapes us now, and which was tied to the earlier Frisians (a ship’s ladder?).

## 20.4 Dutch *oo*

A small number of Dutch words in *oo* unexpectedly seem to continue WGm. \**ai*. Schönfeld & van Loey (1970: 78) suggest that they may contain Old Frisian *ā*, one of the two regular reflexes of WGm. \**ai* in Frisian (see de Vaan 2011a). Inherited \**ǣ* (StDu. *aa*) shifted to /ɔ:/ in many central, eastern and southern Dutch dialects, and Schönfeld & van Loey suggest that the problematic StDu. *oo*-words first acquired *oo* in the dialects in which *aa* regularly became *oo*, and were then borrowed into the standard language. The immediate objection which one can make is why only words in \**ai* would have been involved in this interdialectal borrowing.

In 1951a, Heeroma coins the term ‘derailed franconisations’ for a number of words in which the coastal Dutch vocalism does not directly reflect the inherited vowel of Old Franconian. Specifically for the words in which WGm. \**ai* is represented by *oo*, Heeroma (1951a: 84–85) assumes that the Old Frisian vowel \*/a:/ (< \**ai*, \**au*) was wrongly substituted by OFra. \**ō* (\**au*) instead of \**ē* (\**ai*), due to uncertainty on the side of the Proto-Frisian speakers. In Heeroma’s view, those speakers were replacing their native words with Franconian ones. This explanation was accepted by Bremmer (1993: 25–8, 1997a), but has been refuted explicitly by van Bree (1997a: 31–2), while Weijnen replaced it with an explanation of his own (1965a: 399) that involved indigenous Ingvaeanic rounding of /a:/ to /o:/.

Van Bree has two concrete objections to Heeroma’s scenario: (1) we would also expect the reverse derailment, viz. *ee* for \**au*, but this does not exist; (2) we would expect the derailments to *oo* (and others assumed by Heeroma) to be more sporadic than they are. I would add another, fundamental objection: the language contact scenario assumed by Heeroma is an unlikely one. He starts from the reasonable assumption that L1-speakers of Proto-Frisian would have imposed their own phonological system on the lexicon of their L2 Old Franconian. But he assumes, rather implausibly, that speakers were highly conscious about the etymologies of words: they would have known that the Old Franconian vowel which corresponded to PFri. \**ā* was either *ē* or *ō*, but not *ǣ*, the vowel of their own, Proto-Frisian system which was phonetically closest to *ā*. Whereas one may observe individual cases of ‘etymological substitution’ of this kind in modern, learned speakers, it is unlikely that such variants would survive for a long time in a situation of general language shift, in which the target language (Old Franconian) must have been well known and sociologically superior. Here is a discussion of the alleged evidence for *oo* from \**ai*:

1. *boot* ‘boat’. This noun has been discussed intermittently in recent decades. Rogby (1963) explains it as a ‘derailed franconisation’ in the sense of Heeroma 1951a, that is, with OFri. \**bāt* < \**bait-* as the source noun, which was erroneously

interpreted as having ā from \*au by the Franconian speakers, who remade it into *boot*. Bremmer (1993: 27) follows this explanation, and EWN s.v. *boot* is also sympathetic towards this view. The etymology as \**bait-* – which is only one of the possible sources for OE *bāt* – is thought to be supported by Old Norse *beit* ‘ship’ (in poetry) and Middle and Early Modern Dutch *beitel* ‘little boat’ (after 1445). Kroonen (2013: 48) reconstructs PGm. \**baita-* and surmises that it may have “originally denoted a small boat made of a tree hollowed out like a trough”. This may explain the derivation of ON *beit* from the PIE root \**bʰid-* ‘to split, cleave’ (PGm. \**bītan* ‘to bite’), but it is not certain that Dutch *beitel* directly continues a diminutive of the noun. Instead, its meaning ‘little boat’ may simply be due to metaphorical use of *beitel* ‘chisel; peg, wedge’: most ships can be characterized as ‘wedge-shaped’. As for *boot*, Kroonen thinks that it could be a loanword from Old English or from OFri. \**bāt* (the latter is not attested but can be reconstructed on the basis of Insular North Frisian: FÖ *buat*, Mooring *büütj*). As we have seen in § 20.3, *baat* is only found in Calais, next to Old French *batel*, and it may well have been borrowed from English. So did *boot* go through Frisian mediation, or was it a post-1200 borrowing from southern Middle English?

It is slightly odd that Dutch *boot* is not attested before the fourteenth century, as opposed to older *schip* and *schute*. This could support its interpretation as a loanword, but not from the Frisian substrate, because we would then expect to find *boot* already in the thirteenth century. Another problem is the vocalism: until now, we have seen Old Frisian ā reflected in Hollandish as *aa* (*aterling*, *ladder*, *zwaag*) or *ee* (in various words), but not as *oo*. Thus, both the chronology and the vocalism suggest that *boot*, if it was a loanword, was borrowed from Middle English rather than from Frisian. The chronology and the absence of *bāt* from Old Frisian also speak against it being a ‘derailed franconisation’ of an Old Frisian word.

2. *flikflooien* ‘to flatter’. The Standard Dutch reflex of PGm. \**flaixan-* ‘to flatter’ (MoHG *flehen*) is *vleien*, attested from the thirteenth century onwards. A variant with *oo*-vocalism appears at the end of the fifteenth century, viz. in *al dijn floeyen* ‘all thy flattering’ (1460–80; Holl./Fla.). Subsequently, in a compound with *flikken* ‘to repair’, Early MoDu. *flickefloyen* ‘to flatter’ is found quite frequently with Hollandish and Zealandish authors. In northeastern dialects, such as Groningen, we find *flooien*. The variation between *ei* and *ooi* recalls the vocalism of *ui*<sub>2</sub> (see § 19.5). Compare with a similar phonetic environment StDu. *glui* ‘straw for thatching’, a loanword from Old French *gloï*, *glai*, which surfaces as *gloï* in Bruges (1286, 1291) and as *ghelie* in Ghent (1288–1301). In Modern Dutch we find it as *glei* next to *glui* in Flanders, but as *gloy*, *glui* in Zealand and

South Holland, and *glooij* in northeastern Dutch. It seems possible, therefore, that *flooien* represents an inner-Dutch rounding of earlier *vleien*, with rounding due to the *l*. The distribution of unrounded (and, here, original) *ei* and rounded *ooi* is the same as in a number of words which have a secondary rounded diphthong of the type *ui<sub>2</sub>*, such as *wambuis* and *sputien*. Hence, there is no need to invoke a Frisian substrate, which would be unlikely anyway on the basis of the chronology.

3. North Hollandish MDu. *oghen*, *hoogen* ‘to lawfully possess, own’, 3SG. *hooch* ‘owns’, preterite (*h*)*ochte*, MoDu. dial. *heugen* ‘to belong to’ (Boekenoogen 2004: 178; MNW s.v. *hogen*). The Middle Dutch forms are attested in the fourteenth and fifteenth centuries in charters and town laws of West Friesland. The restriction to North Holland shows that the word was borrowed from Old Frisian *āga* ‘to own’ as a legal term.
4. *lode/lo* ‘creek’. Heeroma 1951a, fn. 4, explains MDu. *lode*, *lo* ‘creek’ as a derailed franconisation of OFri. *\*lāde*, the unattested cognate of Franconian *lede*, *lee* < *\*laidō-* ‘road, stream’, cf. OE *lād*. The oldest attestation is *Morlode* (1204, 1208, also later in the thirteenth century) for a creek on South Beveland, later called *Maarlo*, with a probable first member *mōr* ‘moor’; the same document has the place-name *Morlodenesse*. The usual form in Old Dutch is *-letha*, *-leda*, which occurs in various compound toponyms from Flanders, Zealand and South Holland, and *-lede* in Early Middle Dutch. But it is not certain that *lode* continues the same etymon as *-lede*. Van Durme (2011: 278) lists other medieval hydronyms from North and West Flanders which contain the noun *lode*, *lood* ‘creek’ (1138 *Loth*, 1257 *Loet*, 1297 *Dorloet*, etc.), and the word is also attested as an appellative (1379 plural *looden*). Weijnen (1949: 76) had proposed a semantic shift from ‘moor’ via ‘pool’ to ‘creek’, and Gysseling (1954: 58) had proposed to etymologize the word as *\*laupbō-*, although the further etymology is unclear. The oldest attestation *Loth*, from 1138, could show a genuine fricative *th*, in which case *lode* cannot be identical to *lede* from *\*laidō-*. In view of these considerations, it seems preferable not to regard *lode* as a frisianism.
5. The Middle Dutch noun *lootsman* ‘pilot of boats’ (1389), MoDu. *loods*, is a direct borrowing from Middle English *lodesman* ‘pilot’ (cf. EWN), and can therefore be dismissed.
6. MDu. *loosten* ‘to redeem’. This verb was added to the dossier of alleged frisianisms in Bremmer 1997b, who compared OFri. *lästa* ‘to perform, fulfill; pay’ < PGm. *\*laistjan-* (OS *lëstian*, OHG *leisten*). The Frisian verb is once found translated as *loesten* in a Middle Dutch translation with Low German colouring of the Old Frisian *Skeltanariocht* (Bremmer 1997b: 44). The traditional

explanation of MDu. *loosten* is that MDu. *lo(e)sen* ‘to liberate, redeem, pay’ (cognate with OS *lōsian*, OFri. *lēsa*, MoHG *lösen*) was sometimes back-formed as *loosten* on the basis of the weak preterite, e.g. *loesten* ‘they freed’ (EBrab., 1276–1300). The latter form could be reanalysed as the preterite of a present \**loost-en* instead of original *loos-en* (van Helten 1887: §195, note 1). In Early Middle Dutch, the present still only has *s* or *z* (VMNW s.v. *loossen*<sup>II</sup>). From the later centuries, MNW cites one passage from Jan Boendale’s *Der leken spieghel* from Antwerp (1330) which has *om ... te loostene* ‘for to redeem’, but the usual expression remains *om te loossene*. Under *verlooessen*, MNW explicitly remarks that in many places, it cannot be determined whether we are dealing with *verlooessen* or *verloosten*, and they give examples with the preterite and the past participle of *verlooessen*. The use of *verloosten* in the present tense has prompted a separate lemma *verloosten* in MNW, where the editors list a number of instances from fourteenth-century texts from Brabant and Flanders, the majority of which contain a rhyming, literary figure combining *vertroosten* ‘to comfort’ with *verloosten* ‘to redeem’. Hence, we may safely conclude that *verloosten* arose as a back-formation to *verlooessen*, and may partly have been supported by the rhyme with *vertroosten* ‘to comfort’. The fact that most attestations are from Brabant – and none from Holland or Zealand – further speaks against an interpretation as a frisianism.

7. *moot* ‘a slice of fish or meat’ is usually compared with English *meat* and derived from PGm. \**maitō-* ‘portion’. To explain the vocalism, Heeroma considers a derailed franconisation. Yet the word is attested only once in Middle Dutch, viz. at the end of the fourteenth century in Overijssel (MNW s.v. *slim*), where frisianisms do not normally occur. The next known attestation is from 1561 (Coornhert, *Odysseia*), and subsequently the word becomes more frequent in Hollandish literature. Kiliaan calls *moete* Hollandish. Note that the spelling of the vowel (which Kiliaan took from Junius’ *Nomenclator*, which contains a number of north-hollandisms) suggests WGm. \*ō, or at least it allows for this possibility. In the lemma *moes* ‘mash’ (written in 1907), WNT considers a derivation \**mōt-* from the same root as \**mati-* ‘food’. A viable alternative would be to reconstruct a noun \**mōtō-* ‘portion, slice’ derived from \**mōtan-* ‘to find room, be allowed’ (Kroonen 2013: 372), viz. as ‘allowance’ > ‘portion’. The preservation of ODu. \*ō as /o:/ in Holland (as opposed to its usual raising to /u/) must then be regarded as a dialectal archaism which made it into the standard language (see § 17.2.2 on the reflexes of WGm. \*ō in Holland).
8. *oot, aat* ‘wild oats’. One of the earliest written attestations of this noun is *hoote* from Zealand, in De Perponcher’s *Zeeuwsche Graanbouw* (1800), and

Bremmer (1993: 25) found *oot* in an agricultural handbook from 1799 (by Ponse). According to Bremmer, “the word must be considerably older”. Earlier texts, from Early Modern Dutch, only have *haver* or *evene* for ‘oats’. In modern dialects, ‘oats’ is found as *oot* or *ote*, *aote* in West Flanders, Zealand, parts of Holland and North Brabant, in the Achterhoek, in Limburg and in Groningen (see *PLAND* s.v. *oot*). According to Heeroma (1951a: 84–5) and Taeldeman (1982: 279), *oot* would reflect WGm. \**ait-*, as is found in OE *āte*, PL. *ātan* ‘oats’ (on which see Liberman 2008: 170–4). The *oo*-vocalism would be an instance of a derailed franconisation of Old Frisian \**ā*. Yet Weijnen (2007) points out that the word occurs as /ɔ:t(ə)/ in Groningen, Drente, Achterhoek, and Limburg, where this vowel cannot reflect \**ai*; nor is it a frisianism likely in eastern and southeastern dialects. Taking into account Zealandish *ōôte* (in Zuid-Beveland, Schouwen-Duiveland, Zeeuws Flanders; *WZD*) and Flemish *ote*, Weijnen therefore reconstructs \**aut-* and \**ut-* for the dialectal forms; West Flemish *ate* would be a direct frisianism which continues OFri. *ā*. Weijnen has certainly made a step towards a better solution, but several problems remain to be solved.

Firstly, beside *ote*, *aote*, West Flemish also had the variant *aat*. The most straightforward explanation is that *aat* represents a semantic specialization of Middle and Early MoDu. *ate*, *aet* ‘food’ < \**ā̄ta-* (OS *āt*, OHG *āz*), a derivative of \**etan-* ‘to eat’. This noun is found mainly in Flemish texts. The shift from ‘(human) food’ to ‘wild oats’ can be explained from an intermediate stage ‘animal fodder’ which is actually attested for modern West Flemish *aat*, *ate* (de Bo 1892: 16).

Secondly, the distribution of /a:/ and /o:/ as given by *WVD* for this word does not correspond with the usual variation for \**a* or \**ā̄* before dentals in Flemish (Taeldeman 1979: 62, *FAND* II-III, Map 109). According to the map for ‘oot’ in *WVD*, *aa*-vocalism is prevalent in French Flanders and southwestern West Flanders, and is also found sporadically in the rest of West Flanders, and even a few times in Zeeuws Flanders. *Oot* prevails in northern and central West Flanders and in Zeeuws Flanders. Yet before *t*, we would expect a rounded back vowel from \**a* or \**ā̄* in all of French and West Flanders.

A closer look at the data from the various dialect enquiries which underlie the distributional maps for ‘wild oats’ in *PLAND* and *WVD* largely clarifies this issue. It turns out that the type *aat* on the published maps also includes a large number of Flemish tokens of *oat* or *aot*, which are clearly naive spellings for /ɔ:t/. In other words, many of these forms do match the usual Flemish realization of \**a* or \**ā̄*.

Here is a structured interpretation of the various types given by *PLAND* and some new maps based on them.

With /æ:/: one token of <éét> from Sint Maartensdijk (Tholen);  
 With /a:/: spellings representing /a:tn/, /a:t/, /a:tə/, /ha:tə/ (Map 47);  
 With /ɔ:/: /ɔ:t/ and /ɔ:tə/, spelled as <oat>, <ao(e)>, <òöt>, <ôôt(e)> (Map 48);  
 With /o:/: /o:t(ə)/; (Map 49);  
 With ə-diphthong: spelled <å:tə>, <òò:tə>, <oowetə> (Map 50);  
 With /o:j/: (h)ooit, ôôte, oiëta: sporadically in West Flanders (not on map).



Map 47. *Oot* with /a:/ (dataset: PLAND)

A number of observations can be made on the basis of these data:

- West Flemish *ooë* can only continue \*ā before dentals;
- èè on Tholen may also continue \*ā;
- *oo* in Holland, Brabant and Groningen could reflect lengthened \*o;
- *ao* in Flanders and Groningen would be in line with \*ā (before dentals in Flanders);

- *aa* before *t* in southern West Flanders does not fit any established etymological sequence, but the restriction to this province (excluding French Flanders) is striking.

For Flanders, it is now possible to assume a single word *āte* ‘food’ as the source of the words for ‘wild oats’. On the island of Tholen, the same noun is found with the expected Zealandish reflex /æ:/, whereas in most of French and West Flanders, it has the same vowel as e.g. in *draad* ‘thread’ in *FAND*: /ɔ:/ or /o:/, and a diphthong /o.ə/ in western West Flanders. The same vowel *ā* can yield the forms found in North Brabant and in Groningen. The /ɔ:/ in Zealand and South Holland, and /o:/ in North Holland, cannot directly reflect ODu. *ā*, however.



Map 48. *Oot* with /ɔ:/ (dataset: *PLAND*)

We could assume that *āte* was the original word used in all dialects, that it developed into *aot* by regular sound change in southern, eastern and northeastern dialects, but to *aet* in Zealand, of which faint traces are left. It remained *aat* in conservative southwest Flanders. The form *aot* found in most of Zealand and Holland must then be borrowed from Flemish or from the inland dialects. A different solution is to posit two different lexemes: one being *āte*, the other being Hollandish *oot*. Weijnen 2007 suggests a preform \**aut-* or \**ut-*, but a suitable Germanic etymon of this shape is unknown. In western Dutch, *oot* could in principle reflect \**ovet* 'fruit' (MDu. *oof*, StDu. *oof*), compare Zealandisch *hoot* < \**hovet* 'head'. But this is a last resort, since we have no other indications for this meaning of \**ovet*. For now, I prefer to explain Hollandish *oot* 'oats' as a loanword from inland Dutch dialects.



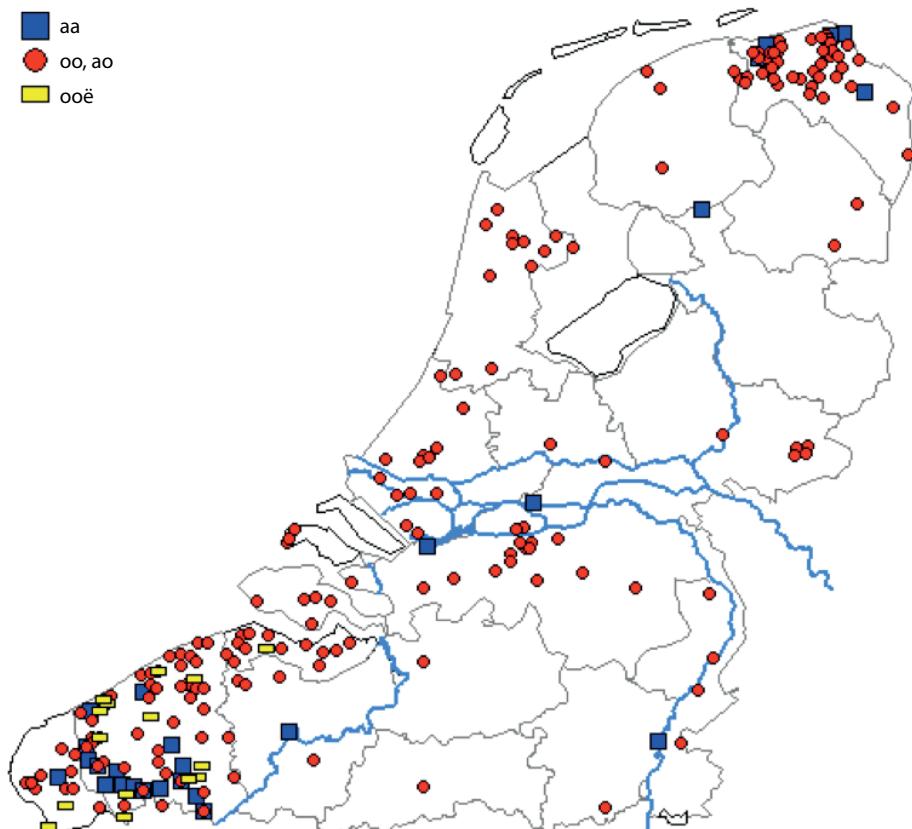
Map 49. *Oot* with /o:/ (dataset: PLAND)



Map 50. *Oot* with /o.ə/ (dataset: PLAND)

9. *roof* ‘skein’ (of yarn), cognate with MoWF *reaf* ‘id.’ < OFri. \*rāf-. The word is cited as a derailed franconisation by Heeroma 1951a: 84, and is derived from PGm. \*raif- by Bremmer 1993: 27, who connects OE ārāfian ‘to unravel’, ON *reifa* ‘to wind’ (< \*raibō-, according to Kroonen 2013: 402). Bremmer also claims that *roof* ‘skein’ must be separated from *roof* ‘fleece (of a sheep)’ < \*rauf-. This separation is also advocated by MNW and WNT s.v. *roof*-1 ‘robbery; fleece’ and *roof*-2 ‘skein’.

Yet I doubt that these represent two etymologically distinct words. *Roof*-1 is used in Middle Dutch and in modern dialects for ‘sheep’s wool’, especially ‘the amount of wool that is shorn off one sheep per year’, ‘yearly yield of wool by a sheep’. For instance, in the *Glossarium Bernense* (1240, Limburg), *wollen roef* occurs as a translation of Latin *vellus*. *Roof*-2 is used for ‘a certain quantity of wool, yarn, etc., which is rolled into a skein or a knot’ (WNT), e.g. *een roof wol* (Boekenoogen 2004), *een rooff van zijn beste garen* (Kackadoris, 1596), *rooff gaerens* (Kiliaan, 1599). As WNT stresses, it is usually the weight or the size



Map 51. Combined map for /a:/, /o:/, ɔ:/ and /o.ə/ in *oot* (dataset: PLAND)

of the *roof* that matters. This usage in quantifying wool or yarn is sufficiently close to that of ‘a year’s yield of wool’ for *roof-1*. Add to this the absence of the use as ‘skein’ before the end of the sixteenth century, as opposed to the much earlier and more widespread notion of ‘fleece’, and the safer assumption clearly is to regard *roof-2* as a simple metonymical instance of *roof-1*. From ‘a woollen fleece’ and ‘a year’s worth of wool’, *roof* came to mean ‘a skein of wool’ and ‘a skein of yarn’. Since *roof-1* is derived from PGm. \**rauba-* (see EWN), it has the expected Dutch reflex of \**au*.

10. *roop* ‘rope’ is a by-form of Dutch *reep* ‘rope; strip (of land)’ < PGm. \**raipa-* ‘strap’, compare OE *rāp*, OFri. *-rāp*, MoWFri. *reap*, Gothic *skauda-raip* ‘shoe-lace’. Heeroma 1951a: 84 and Bremmer 1993: 27 list it among the derailed franconisations. In North Holland, *roop* was used for a specific kind of straw band used in thatching roofs. Boekenoogen (2004: 435) mentions an early attestation of the plural *roopen* from the accounts of Egmond from 1398. Kiliaan (1599) has *roop* ‘rope’ in Hollandish, Frisian and English, where “Hollandish” is certainly

based on the occurrence of *roop* in Junius' *Nomenclator* (1567). In modern dialects, *roop* 'rope' seems restricted to North Holland and Groningen.

Since there is no indication that *roop* was ever found further south than North Holland, we may interpret the word as a borrowing from Old Frisian which took place in North Holland, directly on the basis of Old Frisian *rāp*. Similarly, for *roop* in Groningen and Low German, which mainly indicates rope made of straw, Remmers (1996: 156) rejects the explanation as a derailed (hypercorrect) sound substitution. Instead, he suggests that *roop* continues OFri. *-rāp* in the specialized meaning 'rope (used in thatching)' whereas Low German *rēp* was used in the general meaning 'rope'. Note that, in North Holland, *roop* is neuter, whereas *reep* 'chord' is a masculine noun.

11. *toon*, a dialectal variant of StDu. *teen* 'toe'. Dutch *teen* is the original plural of MDu. *tee* 'toe' < PGm. \*taixʷō-, which was reanalysed as a singular (MLG *tē*, OHG *zēha*, OFri. *tāne*, MoWF *tean*, OE *tā*, ON *tá*). MLG *tēwe* and MoHG dialectal *Zewe* require a Verner variant \*taigʷō- > \*taiwō- (Schaffner 2001: 408). In Early Modern Dutch, *toon*, pl. *toonen*, is first attested in 1583 in van Berensteyn's translation of de Guevara's *Sendtbrieven* (from Amsterdam). The other literary attestations are from Bredero, Vondel, and other North Hollandish authors in the seventeenth and eighteenth century; see WNT s.v. *toon*. In modern dialects, a back-vowel variant *toon(e)*, *tooën*, *town* etc. is found in North Holland, on Texel, Terschelling and Ameland, in Town Frisian dialects (which undoubtedly acquired them from North Hollandish), in northern Overijssel (Blokzijl, Kuinre, Scherpenzeel), and in all of Groningen and northern Drente (see Map 52).

This distribution is in accordance with the theory that Old Frisian *tān* was borrowed as /tɔ:n/ into North Hollandish and into the Low German of Groningen before Westerlauwers Frisian raising of ā to ē, which began around 1450. It is less attractive to assume a derailed franconisation, as advocated by Heeroma 1951a and WNT s.v. *toon*, as this would have happened in two regions independently, viz. in North Holland in the thirteenth century and in Groningen-Drente in the fifteenth century.



Map 52. *Toon* 'toe' in northern Dutch and Frisian

12. *woer* ‘seaweed’, a coastal Dutch variant of StDu. *wier* ‘id.’. The latter form represents a local, Hollandish development from earlier \**weer* < WGm. \**ai*. We may reconstruct PGm. \**waiza-* ‘seaweed’(?), whence OE *wār*, ME *wōr* ‘seashore, beach; seaweed’ (Löfstedt 1966: 56–7, Kroonen 2013: 567). The etymology as \**wīra-* ‘wire’, found in earlier etymological dictionaries, is dismissed by Kroonen on the grounds that it would not explain the meaning ‘shore, beach’ in English. Besides *wier* (first attested in 1466 in Delfland), western Dutch also has the variants *woer* and *woor*, attested from the end of the sixteenth century. According to Kiliaan (1599) and Dodonaeus, *woer* is Zealandish whereas *wier* is Hollandish. Modern dialectal *ôôr*, *wôôr* ‘seaweed, duckweed’ on Schouwen-Duiveland, *wôôrzeise* ‘scythe for removing water plants from ditches’ (Goeree, Schouwen, Western Zeeuws Flanders) has *oo* from WGm. \**au*, rather than Zealandish *oe* from \**ā*. The fact that *woer* is found in Zealand, to the south of the *wier*-area, means that it is unlikely to be a borrowing from Proto-Frisian \**wār* (though not impossible). In StDu. *woerd* ‘male duck’ (from PGm. \**werdan-*) and *zwoerd* ‘bacon-rind’ (from \**swardu-*), we find a Hollandish rounding of Early Middle Dutch *-aard-* to *-oord-* and *-oerd-*. Therefore, *woer* ‘seaweed’ might reflect earlier \**waar*, which could either be a loanword from Old Frisian or a local development of \**ai* in unstressed syllable. Or did Zealandish *wôôr* adopt the vowel of the words *gôôr* ‘duckweed’ (StDu. *goor* ‘mud; moor’), which had become very similar in meaning?

## Summary

The evidence discussed above falls into the following categories:

Frisianisms in North Holland: 3. *ogen*, 10. *roop*, 11. *toon*.

Loanwords from Middle English: 1. *boot* (?), 5. *loodsman*.

Etymology without \**au*: 7. *moot* (\**ā*), 8. *oot* (\**æta-* in Flanders and Zealand), 9. *roof* ‘skein’ (\**au*).

Other explanations: 2. *flikflooien* (rounding from *vleien*), 4. *lode* (hapax), 6. *loosten* (back-formation to *loszen*).

Uncertain: 8. *oot* in Zealand and Holland, 12. *woer*.

In conclusion, only *ogen*, *roop* and *toon* are clear frisianisms, but we must interpret them as direct borrowings from attested Old Frisian words with *ā*, viz. *āga*, *rāp* and *tāne*, not as hypercorrect franconizations.

## WGm. \*au

The regular reflex of \*au in Standard Dutch is *oo*, except in front of WGm. \*w, where we find *ou* (*schouwen* ‘to watch’, *houwen* ‘to hew’), cf. Schönfeld & van Loey 1970: §66, van Loon 2014: 118–21. The monophthongization to /o:/ or /ɔ:/ can be dated after 639, judging by the form *Sclautis* (639 copy 941) for ‘Sloten’ in East Flanders. On the basis of *Gaotbertus*, *Werengaotus* (714, North Brabant), and *Rauchingus* = *Rohingus* (726, Antwerp), van Loon (2014: 119) dates the shift to the first quarter of the eighth century. A date somewhere in the eighth century would be in line with what is found in Old High German, cf. Braune & Reiffenstein 2004 §45. After 900, when Old Dutch sources become more numerous, we find only monophthongized vowels. Some words in \*au are found with a deviating reflex *aa* in coastal Dutch, which has been linked to Frisian substrate (§ 21.1). Small sets of forms in *oe* and *eu* must also be discussed (§ 21.2).

### 21.1 Dutch aa

Gysseling (1962: 9–11) claims that Flanders and all of Northern Germany sporadically display a reflex *ā* of the diphthong \*au. Since \*au > *ā* is the regular Old Frisian development, Gysseling surmises that *ā* radiated from Frisia. It is found in a number of toponyms but has also been claimed for a few appellatives. For Flanders, an earlier collection of *ā*-forms is provided by Mansion (1924: 114–7), who calls them ingvaeonisms. Gysseling’s collection is integrated into the discussion below, though I leave out elements of his enumeration that are obviously Old Frisian, such as words from the provinces of Groningen and Fryslân. In Old Saxon, the more usual reflex of \*au is *ō*, but *ā* is found sporadically too, as in the Heliand (ms. M, C, Straubing fragments), in glosses and in names; examples include *bām* ‘tree’ (Heliand C) and *brād* ‘bread’ (Gallée 1993: 75–6). Krogh (1996: 283–86) offers a more elaborate collection of Old Saxon forms, and interprets the vacillation between <o> and <a> as evidence for an open vowel /ɔ:/, which seems plausible. Krogh (p. 279) also assumes that the occasional spelling of \*au as <a> instead of <o> in Old Dutch points to the vowel having a more open articulation at this stage than in the present-day dialects.

1. *Adinkerke* in West Flanders is attested with *A-* and *O-* in Old Dutch: 1123 *Adenkerka*, 1132 *Odecherca*, 1139 *Adenkerke*, 1159 *Odenkercha*, *Odenkerka*. After 1500, we find 1513 *Adinkerke*, 1537 *Aeyenkercke*, 1566 *Oyenkercke*, 1650 *Oye Kercke*, modern pronunciation /o.jnkar̥kə/. Debrabandere et al. (2010: 26) conclude that the etymology \*Audan \*kirika ‘Audo’s church’ is ascertained by the vacillation between *A-* and *O-*. The form in *A-* has apparently prevailed in the local dialect, where /o:/ is the regular reflex of Old Dutch \*/a:/ before dentals. Since the names *Odo*, *Oda*, *Odbertus*, etc., which contain the same name \*audan-, are only spelled with *O-* in the Old Ghent documents after 1000, it appears that *Adenkerka* may have been a petrified form of the name already in 1123.
2. *Asthusa* (12th century copy ca. 1420) ‘Oosthuizen’ (NHol.). In view of the time and place, this could be a genuine Old Frisian form, comparable to the toponyms in *Ast-* ‘east-’ < \*austa- in the province of Fryslân. The same conclusion holds for the consistent spelling with *A-* of ‘Oostbroek’ near Velsen in North Holland: *Astbroech*, *in Asbroke*, *in Astbroke*, *in Astbroeke* (all 1130–61 copy ca. 1420). For ‘Oostdonk’ in East Flanders, the earliest certain instance is *Ostdunc* (1213). An attestation *Asdunc* (end of 9th c. copy 941) is cited for the same place by Gysseling (1980), who cautions that there are doubts whether this toponym can be identified with present-day *Oostdonk*.
3. Hollandish *baken* and *beken* ‘beacon’ have been discussed in § 19.3, where it was concluded that they represent a frisianism, i.e. a borrowing of Old Frisian \*bāken.
4. *De Bangert* occurs as a toponym in West Friesland, and van Berkel & Samplonius (2006: 42) mention that *bangert* and *bamgert* already occur as toponyms in the Late Middle Ages in this region. It seems likely that they contain Old Frisian bām ‘tree’.
5. The toponym *Dodeman* in East Flanders is transmitted in the *Liber traditionum S. Petri Blandiniensis* as (*in tertio loco qui dicitur*) *Datnesta* (820–22, copy 941), *Dotnest* (966), *Dotnest* (820–22 copy 941 copy middle 11th c.). Mansion (1924: 114) suggests that the name contains /dād-/ ‘dead’ from \*daubu-. The same adjective also occurs in ODu. *Dodachre* (abl.sg.) ‘Doodakker’, which suggests that ‘dead’ means ‘infertile, barren’ or ‘with stagnant water’ (ONW).<sup>206</sup> The only other name certainly containing -nest in Gysseling’s toponymical dictionary is *Odeuarsnest* (1223) ‘Stork’s Nest’ in eastern East Flanders.

Tavernier-Vereecken (1968: 529) also mentions *Vinxnest* ‘Finch’s Nest’, which she tentatively interprets as an original name in -nesse ‘-ness’. Since *Vinc*

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<sup>206</sup>. Also found in MDu. *doo(t)lage*, Early MoDu. *doo(d)lage* ‘marshy soil’, literally ‘dead location’, see MNW s.v. *dootlage* and WNT s.v. *doolage*.

'finch' is also used as a personal name in the thirteenth century in Flanders (VMNW), we might consider an alternative analysis for *Dotnest*, *Datnesta* as containing a personal name in the first member, but there is no good candidate. The name *Dodo*, Early MDu. *Dode* (see VMNW) is found in Old Dutch attestations of a number of place names, such as *Dodewaard* in Gelderland, *Doenrade* in Limburg, *Dodenhausen* in Hessen, and *Dodenhofen* and *Damvillers* in Lorraine. Yet the name *Dodo* contains WGm. \**Dōd-*, with a vowel that would not normally surface as <a>; nor would we expect the stem *Dodon-* to have lost the nasal suffix before 1000 AD, when *Datnesta* and *Dotnest* are attested. Hence, we must for now stick to the interpretation as 'Dead Nest'.

6. *Vronen*, a former settlement in West Friesland, is attested in Old Dutch as *Uranlo* (9th c. copy 10th c. copy end 11th c.), *Franlo* (1083 false 12th c.) and several times as *Vronlo* (1063 copy 12th c.). The spelling <a> occurs in documents from the abbey of Egmond, whereas <o> is found in documents issued in Echternach (communication by Arend Quak, talk in Leiden on 12 April 2014). The name probably contains the GEN.SG. \**frawan* 'lord's' (van Haeringen 1936). In view of the place and time, *Fran-* probably represents a genuine Old Frisian form /frān-/.
7. Noordwijk in South Holland is attested in Old Dutch as *Norhtgo* (9th c. copy 10th c. copy end 11th c.) and *Northgo* (1064 copy middle 12th c.) with /o:/ in the final syllable but also as *Nordtha* (889 copy 1206–26 copy 15th c.; probably an error for \**Nordcha*) and *Nortga* (1083 false 12th c.) with /a:/. Thus, the name seems to contain 'north' and the word \**gawi*, \**gauj-*, whence OFri. *gā* but ODu. *gaw*, *gōi*. The forms in \*-cha and -ga then show the Old Frisian development of \*au to /a:/, whereas the forms in -go represent its Franconian equivalent (Gysseling 1962: 10).

The subsequent forms show the path by which -go came to be replaced by -wijk. Around 1200, we find -ge in *Nortghe* (1199), *Nortge* (1205) and *Norghe* (1222), and -ke in *Northeke* (1168 copy ca. 1200), *Nordeke* (1198), and *Nordeka* (1220), *Nordicke*, *Nortike* (13th c.). Here, the final vowel has been reduced to e. Furthermore, an anaptyctic vowel developed between t/d and k/g and final e was dropped, giving *Noirtich* (1231), *Noortich* (15th c.). Folk etymology gave rise to *Nordijc*, *Nortdike* (late 13th c.) and finally to *Noertwijk* (sporadically after 1450). The introduction of the element *wijk* is probably due to the pronunciation of nearby Katwijk as *kattēk*. By means of hypercorrection, /no:rtēk/ (which is still the local dialectal pronunciation) could be reinterpreted as *Noordwijk* (Schoonheim 1992, followed by Van Berkel & Samplonius 2006: 324–5).

8. *koog*, *kaag* 'land outside the dike'. The etymology of this western Dutch toponym as \**kaig-* or \**kaug-* is disputed; cf. Boutkan 1998a, EWN s.v. *koog*, and Versloot 2012: 117. Modern Westerlauwers Frisian has *keech* 'land outside the

dike; salt marsh'. On the strength of the comparison with North Hollandish *kogge* 'land outside the dike which has been or must be reclaimed' (MNW s.v. *cogge*) from \**kugg-* (Boutkan 1998a: 116), I favour a reconstruction with internal \**u*, hence \**kauga-*, for *Koog* and *Kaag*. The oldest attestations are ODu. *cache* (1116; location unknown), *abbatis cache in Harragan* (NHol., 1105–19), MDu. *coech* (1319), *coich* (1322), *caech* (1354). See ONW and Quak 2003: 289 for the Old Dutch evidence.

Versloot (2012: 116) provides a map of old and modern toponyms of the form *kVg* in Holland and Fryslân. *Kaag* is found around Leiden in South Holland and in West Friesland; it also used to be applied to parcels of land in Zaanstreek (cf. Boekenoogen 2004: 209). *Koog* and variants appear everywhere in North Holland; *kogge* is rarer, and occurs only in central West Friesland. The Frisian form *keech* appears in toponyms in northern Fryslân, and, according to Boekenoogen, it was also used at the end of the nineteenth century in Texel and Wieringen, although the modern dictionary of Texel (Jansen 1993) does not mention it. These data would be easiest to explain if *kaag* reflects Old Frisian \**kāg*, which survived as a toponym in coastal Dutch but not further south than the Rhine estuary. At the same time, *koog* would represent the normal Franconian outcome of \**kauga-*. The form *keeg* in Texel and Wieringen could reflect the internal, North Hollandish raising of MDu. /a:/, compare Texel /lɛ:x/ for StDu. *laag* 'low'.

9. Early Modern Dutch *lichte laeye* 'red-hot flame' (1599), *lichter-laey branden* 'to burn fiercely' (1630), *in lichter laeye staan* 'to be ablaze' (1666), is a compound of *licht* 'clear' and the noun *laeye*, *laye* 'flame', itself attested from the middle of the fourteenth century. A denominal derivative is the verb MDu. *layen* (1460), MoDu. *laaien* 'to be ablaze; to glow with vehemence'. MDu. *laeye* has the same meaning as OS *lōgna*, OHG *loug*, OE *lēg*, ON *leygr* 'flame', all from PGm. \**laugi-*, so it is probably related. The expected Middle Dutch outcome of \**lauga-* or \**laugi-* would be *loogh(e)*, which also exists: *die loghe* 'the fire' (Antwerp, middle of 14th c.), *an lichter looch* 'ablaze' (Holland, 1481), Early MoDu. *loogh* (Hooft, Witsen).<sup>207</sup>

In the absence of another likely source for *laeye*, and since the expressions *in lichter laeye* and *an lichter looch* are so similar, it might be assumed that *laeye* represents a coastal Dutch adoption of the expected Proto-Frisian reflex \**läg-* or \**lej-* of WGm. \**laugi-*. Yet this solution is not without its problems. Firstly, already in the fifteenth century, some of the attestations for *laaie* come from Brabant. Secondly, on the basis of other coastal Dutch words in which PFri. \**ē*

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207. In principle, *loghe* can also reflect \**luga-*, another variant for 'flame' in the Germanic languages.

has given western *ie* or *ee*, PFri. \**lēj-* should rather have become coastal Dutch \**lieje*, or, perhaps, \**leeje*. The outcome *laaie* would be unexpected.

In view of these difficulties, Franck & van Wijk 1912 propose an alternative connection of *laeye* with *lauw* ‘lukewarm’, OHG *lāo*, from \**xlēwa-*, beside which a variant \**xlēja-* can be reconstructed for ON *hlær* ‘warm, mild’ (Kroonen 2013: 231). From an adjective \**xlēja-*, a derived noun \**xlējō-* ‘fire’ or ‘flame’ would regularly lead to MDu. *lāye*, compare *zaaien* ‘to sow’ from \**sēan*, etc. This solution seems preferable.

10. North Hollandish *laan(tje)* ‘trading capital’ (Boekenoogen 2004: 288). Versloot (2012: 117) considers *laan* a possible borrowing from OFri. *lān* ‘salary’, the cognate of Dutch *loon* ‘id.’ < WGm. \**launa-*. Yet *laan(tje)* is only given in two figures of speech by Boekenoogen. The first one is *Der is 'en hele laan toe nodig om zo'n zaak te beginnen* ‘One needs a whole *laan* to start such a business’. To my mind, *laan* can just be the usual word *laan* ‘avenue’, used in a figurative way. Compare the expression *een laan leggen met iemand* ‘to reach an understanding with someone’, given by Boekenoogen s.v. *laan* ‘avenue’.
11. Roomburg, nowadays an eastern suburb of Leiden, is attested as *Radenburch* (1083 false 12th c.), *Radenburg* (1101–1200 copy ca. 1420), and *Rodanburg* (918–48 copy 10th c. copy end 11th c.). The alternation between *Rad-* and *Rod-* suggests that the first member contains Old Frisian *rād* = Old Franconian *rōd* ‘red’ < \**rauda-*. The *Rodanburg* is situated where the Roman castellum *Matilo* was located, which is why van Loon (2000: 38, 73) suggests that -*burg* may be a direct indication of the former Roman settlement. With respect to the vocalism, note that the form *Rodan-* is attested in the Utrecht Register of goods, which goes back to the ninth century, whereas *Radenburch* stems from a younger document issued in Egmond.
12. Voorschoten (South Holland), south of Leiden. The oldest attestations are *Forschate* (918–48, copy end of 11th century) and *Uorscot* (1204 copy 1208). The first element of the compound may reflect a river name \**furō-* (also reflected in the name of *Voorburg*), whereas the second member must represent \**skauta-* ‘higher, sandy ridge amidst marshy grounds’, which exactly fits the situation of Voorschoten. Two other places with <a> from \**skauta-* in Holland are *Scata* ‘\*Schoot’, a settlement that has disappeared beneath the younger dunes, north of Noordwijk, in the same Register of Goods; and *Scatan* (1125–30 copy ca. 1420), a northern suburb of Haarlem which is usually spelled as *Scotan* in the same period.
13. The appellative *sloot* ‘ditch’, OFri. *slāt*, is found with <a> in the following four Old Dutch toponyms from Holland: 1. Akersloot (NHol.): (*in*) *Ekerslato* (1101–1200 copy ca. 1420), (*de*) *Ekkerslato* (1105–20 copy ca. 1420), next to *Ekkerslote*, *Ekerslote* in the same documents; 2. \**Vronensloot* (NHol.): *Fronanslat* (1125–50

- false 1083) beside *Vronanslant*; 3. \*Meensloot (NHol.): *Meneslate* (1191–1210); 4. \*Rechtesloot (SHol., near Oegstgeest): *Rethcheslat* (1130–61 copy ca. 1420). The geographic restriction to Holland north of the Rhine suggests that *-slat* was a frisianism, compare OFri. *slāt*.
14. *Vlaming* ‘Fleming’, *Vlaams* ‘Flemish’, *Vlaanderen* ‘Flanders’. Dhondt & Gysseling (1948) show that, in the oldest documents of the eighth and ninth centuries, the term ‘Flanders’ only refers to the northwestern part of West Flanders, especially the coastal plain north and west of Bruges. The same authors also provide an extensive overview of the earliest attestations of the words ‘Flemish’ and ‘Flanders’ in Dutch, other Germanic languages, Old French, Old Irish and Latin. It is clear that the earliest forms in the local language were *\*flāminga-* for the inhabitants, *\*flāmiska-* for the adjective ‘Flemish’, and the DAT.PL. *\*in flāndrum* for ‘in Flanders’. In Old English, Old Norse, German, and central and eastern Dutch, regular *i*-mutation led to a stressed vowel /e:/ in both adjectives, as in Early MDu. *vlemesch* and *vleming*. The form *\*flāndr-* probably goes back to *\*flām-dr-*, since the reverse hypothesis (viz. original *\*flān-*) would not explain the forms in *flām-*. Yet whether the occasional spelling *vlaemdren* in the late thirteenth century from Bruges and Ghent (4x in total) preserves an old *m* seems questionable.

Dhondt & Gysseling adopt the following reasoning to arrive at an etymology. 1. There is no Germanic etymology for a hypothetical West Germanic form *\*flām-* which would regularly give Old Dutch *\*flām-*. 2. ODu. *\*ā* can also reflect Ingvaeanic *\*ā* from WGm. *\*ai* or *\*au*. 3. WGm. *\*ai* leads to no known etymology, nor would it explain OE *Fleming*. 4. This leaves WGm. *\*flauma-* or *\*plauma-*. 5. A preform *\*plauxma-* is preserved in OE *fleām*, *flæm* ‘flight’, but *\*plauxm-inga-* ‘refugee’ (and similar variants) does not explain the semantics of *Vlaming*. 6. This leaves PGm. *\*flauma-* ‘stream’ (cf. ON *flaumr* ‘eddy’, MoE *fleam* ‘drainage ditch’; Kroonen 2013: 145) as the only viable alternative. 7. The word ‘stream’ may have shifted to ‘inundation’ whence ‘inundated area’, and this would have referred to the Flemish coastal plain, which was characterized by creeks and inlets of the sea. 8. WGm. *\*flauma-* would have given Proto-Frisian *\*flām-*, whence *\*flām-inga-* ‘inhabitant of the inundated area’ and *\*flāmiska-*. 9. The name of the region would contain a derivational suffix *\*-ðra/ō-*, hence *\*flaumdra-* ‘inundation’ > *\*Flāndra-*.

A number of objections can be made to this concatenation of hypotheses. Morphologically, the derivational step which would create *\*flaumdra-* seems very uncertain, since *\*-dra-* is usually added to verbs, rather than to ready-made derivatives. Philologically, there is no evidence of an interchange between <o> and <a> in the words for ‘Flanders’ and ‘Flemish’. Therefore, the starting hypothesis that we must reconstruct an Old Dutch word in /a:/ reflecting Ingvaeanic

or Proto-Frisian \*ā from WGm. \*ai or \*au, remains an uncertain conjecture. The explanation of the suffix in \*flāndrum is problematic within any theory. The closest comparandum seems to be *Taxandria*, from Caesar's *Texuandria*. This is explained as \*texswa-ndr- 'facing the right, southern' by ONW s.v. \*Tehswandalōn 'Tessenderlo'. One wonders if it might have been \*texswan-ra-, that is, a *ra*-adjective to an *n*-stem noun or adjective 'the right (side)'.

15. *zode* 'sod, turf' < \*saupan- m. (OFri. *sātha*, MoWF *seadde*, Schiermonnikoog *sāde*). The noun is found in two variants in western Dutch, with *oo*-vocalism from \*au and with *aa*. The oldest tokens are toponyms from North Holland: *Saden* near Zaandam (ca. 1180), *in Sadenhorne* (1130–61 copy ca. 1420). The noun appears in Flemish as DAT.PL. *soeden* 'meadow' (1151–75, EFla.) but also as PL. *saden* (Grauw, EFla., 1260; *Der Natueren Bloeme*, 1287). Later, *zaden* appears in the accounts of Ghent (1336) and in van Maerlant's *Spieghel Historiael, derde partie* (1301–25). Early modern literary attestations (e.g., 17th-century SG. *soo*, PL. *zoon*) and modern dialects (e.g., North Holland *zood*, Zealand *zôöe*) confirm etymological \*au. The *aa*-forms are decidedly rare; if they are due to borrowing from Proto-Frisian, they represent the very last traces. But the fact that they are only found in Flanders (the North Hollandish forms can be real Old Frisian), just like *Datnesta* and *Adinkerke*, casts doubts on this scenario.

The word MDu. *saddijc*, *saddic*, *zaddik* 'pit or ditch which was created by excavating the ground for the purpose of making a dike with the dug-up earth' also contains the *aa*-variant. It is probably a local frisianism of North Holland, and was borrowed from OFri. *sāthdīk*, *saddik* 'piece of land where sods were dug, pit from digging sods' (> Late OFri. *sadeke* > MoWFri. *saats*; cf. Hoekstra 2010: 101–104). Compare, from the by-laws of Edam (1467), the different vocalism of 'sods' and *zaddick*: *soo wye enighe versche zoden gebracht hadde op sijn werf of hofstede, die sal bewisen dat zaddick waer se ghedolven sijn* 'whoever had brought some fresh sods (*zoden*) to his yard or farm, he shall show the *zaddick* where they were dug'. See Boekenoogen 2004: 440–441 for further attestations from North Holland.

## Summary

It has turned out that nr. 9. *lichte(r) laeye*, and nr. 10 *laan*, are irrelevant for the present discussion, and the etymology of nr. 14. *Vlaam-* is unclear. The remaining evidence falls into three categories.

- Possibly real Old Frisian forms from North Holland: 2. *Asthusa*, 4. *Bangert*, 6. *Franlo*, 15a. *zaddijk*.

- b. Frisianisms in North and South Holland: 3. *baken*, 7. *Northga*, 8. *kaag*, 11. *Roomburg*, 12. *Voorschoten*, *Scata(n)*, 13. -*Slat*. Four of these six words are place names, and *kaag* is a field name. The word *baken* is the only non-toponymical lexeme, though even this word is a denomination for a specific spot on the land.
- c. Flemish words with interchange between <a> and <o>: 1. *Adinkerke*, 5. *Datnesta*, 15. *zode*, *zade*. Two of these words are place-names, which may explain why they could be remnants of a Proto-Frisian layer. All have a dental stop after the <a>, though this may be a coincidence. The rarity of the spelling <a> (*Adinkerke* next to *Odenkerka*, *Datnesta* next to *Dotnest*, *zade* next to *zode*) leaves room for a different explanation. West Germanic \*au first became /ao/ and then /ɔ:/ in the eighth century. It seems conceivable that this phoneme could phonetically vary in terms of rounding, and that a less rounded variant [a:] would be spelled as <a>, as was surmised by Krogh (1996: 279). The same phenomenon is well known from northeastern Dutch and Westphalian, where the result of \*o with open syllable lengthening is variously spelled (and phonemicized) with <a> or <o>. In particular, before the diphthongization of MDu. \*ō to *uo*, earlier \*au > /ɔ:/ must have had a relatively low degree of opening. If this explanation holds, it implies that the vacillation between <a> and <o> can be explained internally.

## 21.2 Dutch *oe* and *eu*

A few western Dutch words allegedly have the reflex *oe* or *eu* from WGm. \*au. Of these, only the first one, *opdoemen*, might reflect a Hollandish development of \*au, but whether the vocalism was restricted to Holland is unclear.

1. *opdoemen* ‘to become visible on the horizon, to loom ahead’ is explained by WNT and most subsequent dictionaries as a North Hollandish variant of MDu. \**opdoomen* ‘id.’, a derivative of the noun MDu. *doom* ‘steam, mist’ < WGm. \**dauma-* (OHG *toum*). This explanation was already given in 1769 by the Hollandish author Berkhey:

Deze verandering (t.w. de omstandigheid dat een verwijderd landschap zich duidelijker dan anders vertoont) word in Noord-Holland opdoemen genaamd, waarschynlyk opdampen, opdoomen, vermits doemen in den zin van doomen moet genomen worden, en doomen juist de betekenis heeft van eene zagte damp-waaseming.<sup>208</sup> (Berkhey, *N.H.* 1, 306)

<sup>208</sup> “This change [viz. the fact that a far horizon shows itself more clearly than usually] is called *opdoemen* in North Holland, probably ‘to steam up, fume’, as *doemen* must be taken in the sense of ‘to fume’, and *doomen* has exactly the meaning of a weak evaporation of fume.”

The earliest instance of *opdoemen* in WNT stems from 1696 (by Salomon van Til, who grew up in North Holland), but most tokens are from the nineteenth century, again from Holland. Whereas *opdoomen* is not attested in Middle Dutch, we do find *vt domen* ‘to exhale’ in Glossarium Bernense (Limburg, 1240), and *domen* ‘to steam’, termed “antiquated” by Kiliaan (1599).

Explaining the /u:/ of *opdoemen* on the basis of the North Holland dialect is problematic, since MDu. *oo* usually comes down as /o:/ or /ou/ in this area (Heeroma 1935: 92, Pannekeet 1995: 88–93). Furthermore, an ancient form in North Holland is *opdiemen*, see § 19.3. Still, there seems to be no better solution at hand than to suppose that *opdoemen* contains a local development of \*au. Possibly, a parallel is found in the rise of *roemer* in the seventeenth century beside etymological *romer* ‘Roman glass’, see § 19.3, nr. 1. Both words would then show vowel raising before *m*.

2. *roer* ‘reed, rush; tube’, *roerdomp* ‘bittern’ (a marshland bird; MoHG *Rohrdommel*), *Roes-* in toponyms < WGm. \*rauza- (MLG *rōr*, OHG *rōr*, ON *reyr*), \*rausa- (Got. *raus*, ODU. *rōs*). Dutch preserves forms with and without the effects of Verner’s voicing. With *r* < PGm. \*z, we find MDu. *roer* ‘reed, rush’ (1426, 1429; accounts of Rotterdam), also ‘gun’ (1450). Voiceless *s* occurs in ODU. *rōs* ‘reed’ (Reichenauer glosses, 8th c.), MDu. *roesdommel* (1360), *roisdommel* (1477; *Teuthonista*) ‘bittern’. The same Middle Dutch form \*ro:s-/ is also presupposed by modern dialectal Central Limburgian *rosdomp* (WLD) and North Brabantish *roosdomp* ‘bittern’ (WBD). The West Frankish form \*raus > \*rōs is probably also reflected in Medieval Latin *rausum* (9th c.), *rosum* (1268), *rausus*, *ros*, and in Old French *ros* whence Modern French *roseau* ‘reed’ (thus EWN, against the assumption that *ros* represents a West Gothic loanword in French). Finally, \*rōs- is frequent in many place-names: northern French *Roubaix*, Flemish *Rozebeke* (both from Frankish \*Rōs-baki), *Roeselare* (821 copy ac. 1300 *Roslar*), *Roosbroek* (1212–23 *Roesbroec*), North Brabant *Rosmalen* (9th c. *Rosmella*), Limburg *Rosmeer* (1280–90 *Roesmer*), and others.

For the Middle Dutch forms in <oe> and <oi>, it remains uncertain whether they reflect /o:/ (< WGm. \*au) or /u:/ (which would normally go back to WGm. \*ō). For Kiliaan, *roer* ‘reed’ counts as “German, Saxon, Sicambrian”, that is, eastern Dutch and German. The name of the ‘bittern’, *roerdomp*, is thought by EWN to have been borrowed from German, the original Dutch form having -s-. In view of the Middle Dutch and dialectal forms which continue /ro:s-/ (see above), this seems likely. It follows that *roerdomp* ‘bittern’ is irrelevant for the question of how WGm. \*au is reflected in Dutch.

In the meaning ‘gun’, however, *roer* is a frequent word in seventeenth-century Dutch literature, and it is never spelled with <oo>. Note that MDu. *roeder* > MoDu. *roer* ‘rudder, helm’ has a similar, stick-like form to a ‘cane’. In view of

this fact, it is conceivable that *roer* ‘gun’ does not continue the word for ‘reed’, but rather ‘rudder’. Originally, however, it was *roer* ‘reed’ which was used for ‘gun’, as shown by the Middle Dutch and Middle Low German occurrences without *-d*.

3. *beus* ‘upset’. A reflex *eu* is not normally found in Holland for *oo* from WGm. \**au* (cf. van Santen 1959, Boekenoogen 1897: xxx, Heeroma 1935: 92). The adjective *beus* ‘upset, bad, cunning’ is found in some seventeenth-century authors from Holland (Roemer Visscher, Vondel, Hooft, Starter, Rotgans) beside more usual and dialectal *boos* (Boekenoogen 2004). It goes back to WGm. \**bausja-*, as shown by OHG *bōsi*, Drente, Groningen *beuze*, *beus*, Veluwe *beus*, Campine, NE-Brabant *beus*. Hollandish *beus* must therefore be an imported word from Brabant, as we more often find in the writings of e.g. Vondel and Hooft; *pace* Verdenius 1943: 206, who regards *beus* as an indigenous Hollandish word. Similarly, the frequentative StDu. *beuzelen* ‘to talk nonsense’ is first attested in Brabant, in *boselen* ‘to talk nonsense’ (1542; Pelegromius), *beuselen* (1573; Plantin), *onghebueselt* ‘unlied’ (Antwerpen, 1561). The same goes for the Early MoDu. noun *buesel* ‘nonsense, gossip’ (attested in Brabant, Flanders, Zealand, Holland), which is probably a deverbal noun.

## Summary and conclusions

The working hypothesis to be tested in this book was the presence of a Proto-Frisian substrate in western Dutch. The tables in 22.1 help to summarize the results by providing for each feature information on its limitation to coastal Dutch (yes, no, partly) and on its most likely origin (here called “status”) in coastal Dutch, viz. from imposition from Proto-Frisian, from the borrowing of individual words, or from internal development independent of any substratum. In Section 22.2, the evidence for direct borrowings from Frisian (Proto-Frisian, unattested Old Frisian, attested Old Frisian) will be highlighted, followed in Section 22.3 by a discussion of the evidence for continuity versus shift in the coastal area in the Middle Ages.

### 22.1 Summary of the results

#### a. Consonant phenomena

**Table 47.** Summary of the results for the consonant phenomena

Change	Coastal vs. inland Dutch	Status in coastal Dutch
palatalization in TK-clusters	no	internal development
<i>g</i> > <i>j</i> before <i>i, e, C</i>	no	internal development
- <i>Vg</i> > - <i>Vj</i>	yes	imposition from PFri. (possibly)
* <i>j-</i> > <i>g-</i> before <i>i, ī, e</i>	no	internal development
* <i>ga-</i> > <i>je-</i>	partly	imposition from PFri. (possibly)
<i>ft</i> > <i>xt</i>	partly	internal development
- <i>g</i> > - <i>f</i>	no	internal development
<i>h</i> -loss	yes	imposition from PFri. (possibly)
<i>Vrxt</i> > <i>rVxt</i>	no	internal development
<i>xs</i> > <i>ss</i>	no	internal development
<i>pb</i> > <i>ss</i> and <i>tt</i>	no	internal development

Whether the three phenomena marked as possibly resulting from imposition of Proto-Frisian features really point to substrate influence is a matter of interpretation. The relevant allophones were not distributed in exactly the same way in Proto-Frisian and Old Franconian. Whereas in Proto-Frisian, \**g* had been palatalized

to /j/ after and before front vowels (OFri. *dei* ‘day’ < \**dag*, *ield* ‘money’ < \**geld*), Old Franconian retained a velar stop or fricative in these positions. This might have led to the replacement of Old Franconian /g/ or /ɣ/ with /j/ by L1-speakers of Proto-Frisian. Also, the western loss of initial *h*- could be explained from a mismatch between the pronunciation of \**x* in Proto-Frisian and Old Franconian, as we have hypothesized in Section 10.3. But all three cases remain inconclusive. The palatalization of \**g* found in word-final position and in the prefix \**ga-* is also found in inland Dutch and in Middle Franconian, viz. word-internally in the sequences \**egC* and \**a/e/igeC* (when syncope took place), so that it may be argued that coastal Dutch has merely extended this tendency a bit further than the inland dialects. As to *h*-loss, it is a relatively trivial change which may have been independent of any external influence on Flemish.

### b.1 Short vowels (except \**u*)

Table 48. Summary of the results for the short vowels (except \**u*)

Change	Coastal vs. inland Dutch	Status in coastal Dutch
<i>e</i> < * <i>a</i> in modern dialects	yes (North Holland)	imposition/borrowing
<i>esk</i> < * <i>ask</i> , <i>esp</i> < * <i>asp</i>	no	internal development
<i>ghetel</i> , <i>dek</i> , <i>grem</i> , etc.	no	internal development
<i>bled(de)</i> , <i>vek(ke)</i> , <i>steppen</i>	no	internal development
<i>step</i> , - <i>schep</i>	yes	internal development
<i>Veger-</i> , <i>Gent</i>	yes	imposition (possibly)
<i>long</i> for <i>lang</i> , etc.	yes (Flanders)	imposition (possibly)
<i>a</i> > <i>o</i> plus lengthening before * <i>mf</i> ,	yes	imposition (possibly)
* <i>ns</i> , * <i>np</i> , * <i>nx</i>		
<i>all-</i> > <i>oll-</i>	yes (Flanders)	internal development
<i>af&gt;of</i> , <i>ambacht</i> > <i>ambocht</i>	yes/partly	internal development
nasal loss before <i>f,s,th</i>	yes	imposition (possibly)
breaking of <i>e</i> to <i>jo, ju</i>	yes	borrowing

The reflex *e* from \**a* in North Holland may be due to more recent language shifting from Frisian to Hollandish, and in some cases we may be dealing with borrowed words. The latter is certainly true for the word *tjuch*, *tuch*, *tich*, which shows the Frisian breaking of \**e* to *ju*. Of the remaining possible evidence for substrate influence, the names *Veger-* and *Gent* might be ascribed to the fronted pronunciation of /a/ in Proto-Frisian, but their isolation makes them quite uncertain. The prenasal rounding in *long* for *lang* would fit in a Proto-Frisian substrate scenario but could also be a recent local development. In *of* and *ambocht*, we could be dealing with a local development conditioned by the labial consonants and a relatively early date

of unstressed vowel reduction in Flanders. The latter development, in turn, might – but does not have to – be due to substrate influence (see further below).

The (rounding and) compensatory lengthening of short vowels before nasal plus voiced fricative presents the best evidence for a possible substrate layer. Still, there is no way to exclude that the coastal change took place within the Franconian dialects of the Old Dutch period themselves, and remained restricted to the coastal area for dialectgeographic reasons. Whichever population was responsible for the denasalization, its distribution in the lexicon shows that the words affected by it were relegated to the periphery of the lexicon, while the central vocabulary reintroduced or kept the anteconsonantal nasals (e.g., *kind*, *mond*, *rund*, *tand*, *ander*).

## b.2 Short \*u

**Table 49.** Summary of the results for short \*u

Change	Coastal vs. inland Dutch	Status in coastal Dutch
unrounding *ü > i in CDu. <i>ja-</i> and <i>jō</i> -stems ( <i>pit</i> , <i>brigge</i> , etc.)	yes	imposition (possibly)
fronting of *u, *o to Dutch <i>u</i> and <i>eu</i>	yes	imposition (possibly)
unrounding in Flemish <i>ip</i> , <i>schippe</i>	no	internal development
unrounding of *ü in open syllable ( <i>evel</i> , <i>knekel</i> , etc.)	to a large part	internal development

The unrounded vowels of the type *pit*, *brigge* continue Old Franconian \*-üCC'-, that is, these words went through a stage with a palatal geminate. They would have had an endingless nominative and accusative singular as far as they are masculine and neuter *ja*-stems (*hil*, *pit*, *stik*, *rik*), whereas the feminine *jō*-stems (*brigge*, etc.) would have had polysyllabic case forms throughout. Because of their palatalized consonant, they had no (analysable) umlaut factor in Old Franconian. Under the view, then, that the coastal Dutch forms with /i/ are due to a language shift, they can be explained as the result of adaptation of Old Franconian forms to the Proto-Frisian phonological system (see Table 39 in § 15.2.5).

An alternative, internal explanation for the unrounding within Old Franconian requires postulating the same early reduction of the final vowel plus the rise of a palatal geminate, at a date when the language did not yet have the front rounded vowel phoneme /y/ which later arose before preserved *i*- and *j*-endings. The coastal dialects would then have reassigned phonetic [y] in, e.g., \**stükk'* to the phoneme /i/.

The unconditioned fronting of \*u to /ʌ/ in closed syllables and /ø:/ in open syllables presupposes a distribution of (originally allophonic) \*u and \*o within western Old Dutch that to a large degree resembled the one found in Proto-Frisian and Old

Saxon, with high \**u* in particular before *i*-mutation factors, before \**u*, after labial consonants and before nasal consonants. This feature, and the relative chronology of developments which it presupposes, makes a Franconian-internal explanation entirely plausible. A substratum scenario is not necessary to explain the facts, although it would also not be in conflict with them: the imposition of, for instance, a Proto-Frisian allophonic distribution of \**u* and \**o* on Old Franconian would have led to the same results. In the case of an internal scenario, it is attractive to assume that the (originally Flemish) fronting of \**ü* to /y:/ led to the (Flemish-centred) fronting of the corresponding short rounded back vowel.

Coastal Dutch words with lengthened /ø:/ in open syllable from WGm. \**u* probably shared in the western fronting of \**u* to \**ü* before open syllable lengthening applied. The /ø:/ was then unrounded before or after a labial consonant (*evel, krepel, peluw*, etc.) or beside another consonant which can have rounding effects on a vowel in Dutch (*r, k*). It follows that these unroundings do not represent a substrate feature. The unrounding in Flemish *ip, schippe*, can easily be explained as a more recent, local process, again before a labial consonant.

### c. Long vowels

A number of long-vowel phenomena (see Table 50) can be connected with the Proto-Frisian substrate along the coast or, more locally, with the Old Frisian adstrate in North Holland, but the certain cases all concern loanwords. From the Proto-Frisian layer, this applies to the words with *ie* from \**æ*, the three words with unrounding of \**ü* (*hide, hiden, kies*), the four or five forms with unrounded \**ö* (*ondief, smieë, griede, Swieten*, and possibly *hiel*, which could also be genuine Franconian), and *baken* and *kaag* with *aa* from \**au* in Holland. However, Flemish *Adinkerke, Datnesta, zade* with /a:/ from \**au* have a dental stop after the <a>/<o>, though the number of words is so low that this may be coincidental. It seems safer to interpret the vacillation between *a* and *o* in these words as reflecting phonetic variation between a greater or lesser degree of rounding of \**au* > /ɔ:/ than as a reflex of a Proto-Frisian substrate.

In the *aa*-reflexes of \**ai*, the frisianisms are restricted to Zealand and Holland, with the exception of *vracht* which became more widely spread. The terms *aft, asighe*, and *vracht* are closely related to the juridical and economical system of medieval Frisia and were probably borrowed as part of that jargon. *Zwaag* is a term of local toponymy. Only *atter* and *ladder* belong to the unmarked vocabulary.

Some loanwords were taken directly from Old Frisian and are restricted to North Holland: the words with *ja(a)* as a reflex of \**eu*, the three words with unrounding of \**äü* to *ie* (*opdiemen, stiemen, tiemen*), and the three words with \**ai* reflected as *oo* (*ogen* ‘to own’, *oop, toon*).

Table 50. Summary of the results for the long vowels and diphthongs

Change	Applies in coastal Dutch	Status in coastal Dutch
general retention of *ū as /u(:)/ (16.1)	no	–
oe-relics in toponyms (16.2)	no	–
oe-relics in the lexicon (16.3)	no	borrowing (possibly, in only 1 case)
ee-reflex for StDu. ie (17.1)	no	internal development
complementary distribution of *ō before dentals vs. labials & velars (17.2.2)	yes	internal development
shortening to o before m (17.2.3)	partly	internal development
shortening to o before obstruents (17.2.3)	no	internal development
CDu. eu from *ō without i-mutation (17.3)	yes	internal development (spor.)
ja, aa from *eu(17.4)	yes	borrowing (in NH)
WGm. *æ yields ee or ie (18)	yes	borrowing ( <i>mede, mielen, triem, wiel</i> , possibly <i>deek, Ee, mede</i> )
unrounding of *ū (19.1)	yes	borrowing ( <i>hide, hiden, kies</i> )
unrounding of *ō(19.2)	yes	borrowing ( <i>ondief, smieë; Hol. griede, Swieten; uncertain hiel</i> )
unrounding of *äü(19.3)	yes	borrowing ( <i>opdiemen, stiemen, tiemen</i> in NH)
unrounding of *iu (19.4)	yes	internal development or imposition from PFri.
*ai reflected as Fle. ee, Holl. ie	yes	internal development
*ai reflected as Fle.Holl. ei	yes	internal development
*ai reflected as a (20.3)	yes	borrowing ( <i>aft, asighe, atter, ladder, vracht</i> in Holland)
*ai reflected as aa (20.3)	yes	internal development (unstressed, in Hol.)
*ai reflected as oo (20.4)	yes	borrowing ( <i>ogen, roop, toon</i> in NH)
*au reflected as aa (21.1)	yes	borrowing (in Holland)
*au reflected as ODu. a/o (21.1)	in 2 forms	borrowing (toponyms) or internal development
*au reflected as oe or eu (21.2)	no	–

The unrounded reflex *ie* of \*iu can be interpreted either as the result of imposition or as an internal Franconian development. The reflexes *ee* (Flemish) and *ie* (Hollandish) of \*ai may point to an original change \*ai > \*/e:/ across the board. The monophthong was then raised to *ie* in Hollandish, whereas it remained in Flanders but was pushed back from east to west by lexical diffusion of the eastern variants. The raising to *ie* in Holland can be interpreted as part of a chain shift from /e:/, /e:/

(continuing ODu. \**ae*, MDu. \**e* before *r*, OFri. *ē*) to /i.ə/, and from /a:/ (continuing ODu. \**ā*, \**a* + OSL, \**a* before *r*) to /ɛ:/, /e:/. The Hollandish and Flemish relic forms in *ei*, such as *vleis*, may reflect a later development /e:/ > /ei/ before dental consonants, but this does not work for *teiken*, *heim*, *bleik*, with *ei* before labials and velars. Hence, the *ei* in these words ultimately remain unexplained.

Other alleged frisianisms have turned out to be irrelevant. The complementary distribution of \**ō* before dentals, on the one hand, and before labials and velars, on the other hand, is found in all of coastal Dutch, but the reflex is not the same everywhere. There is no evident link with a Proto-Frisian substrate, and the conditioned split may be regarded as a trivial development.

Shortening of \**ō* before *m* is not only found in coastal Dutch, and it may be due to a relatively recent (Middle Dutch) phonetic change /oəm/ > /om/. Shortening of \**ō* before voiceless stops is part of a general tendency in Dutch dialects.

The fronting *ō* > *eu* reflects the stylistically motivated importation of an eastern, *i*-mutated form in literary texts in *zeut*, *geneugte*, *reukeloos* and *veugen*, and the adoption of eastern *i*-mutated forms in daily speech in *beuk*, *breur*, *meui*, and *teuven*. The word *weunsdag* may have unconditioned fronting of short \**o* plus open syllable lengthening.

## 22.2 Loanwords from Frisian

These can be divided into at least three different groups, according to their geographic spread. Words found only in North Holland are likely to belong to the most recent layer of loanwords from Old Frisian, and their borrowing can in theory be as late as the thirteenth century, or even later if we allow for the possibility that Old Frisian dialects continued to be spoken in North Holland in the late medieval period. This group consists of four subsets:

- *ja, aa* from \**eu* (NH *jaar*, *tjad*, *vlaar*, *vlaremuis*)
- *ie* from \**äü* (NH *opdiemen*, *stiemen*, *tiemen*)
- *aa* from \**ai* (NH *zwaag*)
- *oo* from \**ai* (NH *ogen*, *roop*, *toon*)

Three further subsets are also found in South Holland down to the mouth of the river Rhine and therefore presuppose a borrowing date before 1100. In nearly all cases, the evidence consists of toponyms or appellatives connected with the local landscape. Thus, they can safely be interpreted as loanwords from Early Old Frisian spoken in the area before 1100.

- *jo, ju* from \**e* in Hollandish *tjoch, tjuch, tich*
- *ie* from \**ō* (NH *griede, SH Swieten*)
- *aa* from \**au* (*baken, Northga, kaag, Roomburg, Voorschoten, Scata(n), -Slat*)

Short *a* for \**ai* is found further south, including in Zealand in the case of *ladder* and inland Dutch in the case of *vracht*, but not in Flanders. The evidence consists of appellatives rather than place-names. The terms *aft, asighe*, and *vracht* belong to the fields of law and administration and may have been borrowed and spread for political and administrative reasons beyond their original distribution. In any case, their original borrowing must precede the defrisianisation of South Holland around 1100.

- \**ai* reflected as *a* (*aft, asighe, atter, ladder, vracht*)

A final group consists of three small subsets of forms which are found from North Holland to Zealand and, partly, to Flanders. Their isolated position within the general vowel developments of western Dutch, and the existence of cognate words in Frisian, suggest that they were borrowed from Proto-Frisian. Here I add the regions for which <*ie*> is attested, with H = Holland, Z = Zealand, F = Flanders. The terms *mede, wiel* and *hide* refer to local toponymy, but the other words are normal appellatives:

- WGm. \**æ* yields *ie* (HZF *mede*, F *mielen*, HZF *triem*, HZF *wiel*; uncertain HF *lieke*)
- Unrounding of \**ü* (HZF *hide*, HF *hiden*, HZ *kies*)
- Unrounding of \**ō* (HF *ondief*, ZF *smieë*)

Given the distribution of these words, one might ask whether they were borrowed *in situ*, thus, also south of the Meuse or even the Scheldt, or whether they were borrowed in Holland and subsequently spread, via lexical diffusion, to Flanders. In view of their distribution, I think that the first answer is more likely. With one exception (*kies*, which was apparently replaced in Flanders by a different lexeme), all words are attested in Flanders, and *mielen* is even without a Hollandish counterpart. Furthermore, Flemish *wiel* against usual Zealandish *weel* shows that this word, too, cannot have been borrowed with *ie* from Zealandish.

### 22.3 Language shift or language continuity?

This section discusses the most likely scenario that explains the linguistic facts in combination with what we know about the demographic history of the western Low Countries. Here is a list of the systematic phonological changes in coastal Dutch which, according to our preliminary conclusions, may be remnants of linguistic contact with Proto-Frisian:

- a. The fronted reflex *e* of WGm. \**a* in modern dialects of North Holland stands apart. Its geographic diffusion makes it likely that it goes back to the relatively late shift from Old Frisian to Hollandish in North Holland in the thirteenth century.
- b. The two isolated cases of raising of \**a* to *e* in the Old Flemish names *Veger-*, *Feier-* and *Gent* might reflect a fronted pronunciation of short /a/ in an erstwhile substrate, which would then have passed these words on to Flemish. Alternatively, the neighbouring consonant *g*, of which we know that it had a palatalizing influence on \**a* in the sequence \*-agC-, may have fronted the vowel as part of a purely dialect-internal change.
- c. The changes of word-final -Vg > -Vj and unstressed \*ga- > je- are very similar and may well belong together. Proto-Frisian \**g* had been palatalized to /j/ after and before front vowels but Old Franconian retained a phonological velar stop or fricative, of which it is likely that it had a fronted allophone in the vicinity of front vowels. Therefore, in language contact between Proto-Frisian and Franconian, the speakers of the former may have identified Franconian [je-] with PFri. \*/je-/. But palatalization of \**g* to /j/ after front vowels (and \**a*) is also found in inland Dutch before dental consonants. If the dialects of coastal Dutch extended this tendency to identify fronted \**g* with /j/ to pretonic anlaut and to auslaut, it could be interpreted as a dialect-internal change of Franconian.
- d. A trivial change, for which an internal explanation can never be excluded, is represented by the loss of initial *h*- . Alternatively, in a language contact scenario, *h*-loss may be due to a mismatch between the pronunciation of \**x* in Proto-Frisian and Old Franconian along the lines argued for in § 10.3.
- e. Three developments involving nasals may belong together: (1) *a* > *o* before a retained nasal; (2) *a* > *o* plus lengthening before \**mf*, \**ns*, \**nb*, \**nx*; (3) nasal loss before *f*, *s*, *th*. The Proto-Frisian origin of the first of these is quite uncertain, since the rounding is restricted to Flanders. It may well be due to an internal development in coastal Dutch, but it would also fit with a language contact scenario. The other two phenomena are clearly linked together. In a language contact scenario, the rounding of \**a* before a lost nasal may be explained from phonetic rounding of \*/ā/ as [ō] in Proto-Frisian, which was then imposed

onto Old Franconian \**ā*. The nasal loss may have been regular in all instances, whilst now surviving mainly in toponyms (*-muide, zuid*) and in words of low frequency or without counterpart in Franconian. Words with retained *n* would reflect the later adoption of the core vocabulary from Franconian (e.g., *kind, mond*). The general nasal loss in forms in \*ns as against the more frequent retention of the nasal in \*np might be linked to a difference in the target language (Franconian) which we cannot retrieve anymore. Possibly, Franconian had more nasalization in the former sequence than in the latter.

These considerations also point to the solution in the case of a language-internal explanation within coastal Dutch. It is possible to argue that a nasal phoneme \*/ā/ was realized as rounded [ō] in western Dutch, and that nasal loss plus compensatory lengthening was regular before \*ns and \*np in the coastal dialects as opposed to inland Dutch.

- f. The final four changes to be discussed all have, or may have, to do with the absence in coastal Dutch of *i*-mutation on other vowels than WGm. \**a*, viz.: (1) Unrounding \*ü > i in coastal Dutch *ja-* and *jō*-stems; (2) Fronting of \**u, o* to *u* in closed and *eu* in open syllables; (3) Unrounding of \*iu; (4) \*ai reflected as Flemish *ee*, Hollandish *ie*.

The absence of *i*-mutation, which these four phenomena have in common, has been interpreted in two ways. In Buccini's language shift scenario, Old Franconian words with allophonic \*[ü], \*[iü] and \*[äi] before an *i*-mutation factor were adopted by L1-speakers of Proto-Frisian as unfronted \*/u/, \*/iu/ and \*/ai/ without a following *i*-mutation factor. If the second syllable did not contain a synchronic umlaut factor anymore in Old Franconian (mainly because WGm. \*j had been absorbed by the palatalized, geminate stem-final consonant in *ja-* and *jō*-stems), \*[ü] was adopted as unrounded /i/ by speakers of Proto-Frisian. In a continuity scenario, such as that advocated by van Loon (2014), Old Franconian allophonic \*[ü], \*[iü], and \*[äi] before an *i*-mutation factor were restored to unfronted \*/u/, \*/iu/, and \*/ai/ because of an early reduction of unstressed *i*-vocalism to schwa in the western dialects. The subsequent fronting of \**u* to short *u* and long *eu* is a secondary development in both scenarios, which was caused by internal pressure in the vowel system in the relevant period.

Nielsen (2000a: 79–81) has noted the parallelism between, on the one hand, the reduction of the system of unstressed vowels in Old English from four vowels /i, æ, a, u/ in the eighth century to three vowels /e, a, u/ in the ninth century, after a merger of unstressed \**i* and \**æ*; and, on the other hand, the triangular system of unstressed vowels in the oldest Old Frisian ms. R1 (Boutkan 1996), which has /i~e, a, u~o/, with the variants /e/ and /o/ after long or polysyllabic stems and stems with a mid vowel. It is conceivable that

the Proto-Frisian substrate in the western Low Countries had the same system of unstressed vowels,<sup>209</sup> meaning that unstressed \**i* was not immediately reduced to schwa but had lost its *i*-mutating capacity after the seventh century. This scenario would thus be compatible with a language shift scenario for coastal Dutch. Alternatively, in a continuity scenario, coastal Old Franconian would have undergone this type of reduction in unstressed syllables itself (after all, it is a trivial kind of reduction) maybe as an areal feature in contact with Proto-Frisian varieties.

I conclude that the facts as we have them allow for both answers, the shift scenario and the continuity scenario. On the one hand, the discussion under (a) to (f) above can be argued to have invalidated each separate argument in favour of a substrate scenario. If no single development remains which must and can only be ascribed to a Proto-Frisian substrate, it may be argued, there remains no structural reason to assume such a substrate in the first place. This view would favour the continuity scenario. On the other hand, the possibility of a substrate origin has not been dismissed for each of the phenomena under (b) to (f) separately. Therefore, if at least (c) to (f) would apply (b being restricted to only two words), we would have a set of four phonological changes in coastal Dutch which may be explained on the basis of a Proto-Frisian substrate. They concern a tightly defined set of allophonic differences of the kind that one would not be surprised to find as a substrate phenomenon: the pronunciation of /g/ in non-prominent position, the pronunciation of /x/ or /h/, the realization of clusters of nasals plus voiceless fricatives, and the high or non-high pronunciation of posttonic vowels. This would then speak in favour of a shift scenario. The presence of a small amount of loanwords from Proto-Frisian in southern coastal Dutch, especially those with *ee* or *ie* for WGm. \**ã* (StDu. *aa*), those with short *a* for \**ai*, and those with unrounded reflexes of \**ü* (*hide*, *hiden*, *kies*) and \**õ* (*ondief*, *smieë*, maybe *hiel*), may well confirm the erstwhile presence of a Proto-Frisian layer.

The Frisian population of the western coastal area cannot have been very numerous in the Merovingian period, and it probably did not stretch very far inland south of the Maas. There may have been a mix of Frisian speakers and Franconians along the mouths of the Rhine and Maas, judging by the toponyms. The presence of the features from (c) to (f) to an equal degree from North Holland to Flanders is

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<sup>209</sup>. I am well aware that the retention of these vowels in R1 is strongly connected to the tonal character of Rüstringen Old Frisian, and cannot be projected back into Proto-Frisian. Nonetheless, what matters here is the possibility that unstressed \**i* had already ceased to cause *i*-mutation before all unstressed vowels had merged into schwa.

the main explanandum in the geography of the linguistic features of coastal Dutch, and has already puzzled previous scholars. I will discuss three possible answers.

1. In a language shift scenario, the equal distribution of these features presupposes either that a single substrate-superstrate shift took place at a specific moment in time in the whole coastal area, or, alternatively, that the shift took place in one part of the coastal area, which later imposed its linguistic character on the other provinces. Since North Holland is excluded (as it remained frisophone until the thirteenth century), and since South Holland is unlikely to have spread its dialect to all of Flanders before 1200 or even 1500 (because this would go against the socio-economic balance of powers at the time), only Flanders remains as the possible original area of radiation. This, indeed, is Heeroma's solution (1965: 18–20): Flanders was the first region to lose its Proto-Frisian speech, followed by Zealand, South Holland and, eventually, North Holland. Unfortunately, we have no historical indications for the kind of demographic influence of Flanders on Holland in, say, the eleventh century, which would explain how South Holland would have adopted Flemish speech. Moreover, in Flanders we are faced with another problem. The absence of Frisian toponyms and anthroponyms and the general exclusion of the territory south of the *Sinfal* (the Zwin at Bruges) from any territory called "Frisian", rules out the possibility that actual speakers of Proto-Frisian (or, for that matter, other varieties of non-Franconian speech) were settled in Flanders in any significant numbers. We might make an exception for the strip of land immediately by the sea, which was characterized by tidal flats. But this is a small, and, in the Early Middle Ages, demographically insignificant area, so it seems unlikely that its coastal population would have been able to impose its dialect on the much larger and more prosperous inland of Flanders between the sea and the Scheldt – which is what we would need to assume to explain the homogeneity of the coastal features of Flemish.
2. In a continuity scenario, we could assume that the same linguistic changes took place in the Old Franconian dialects of all of Flanders, Zealand and South Holland, including phenomena such as nasal loss before fricatives and the reduction of unstressed *i*-mutating vowels. In theory, it is conceivable that the bulk of these changes took place in Flanders, whence they spread to coastal dialects in Zealand and Holland, but, as said above, explicit evidence for demographic influence of Flanders on Holland in this period is missing.
3. A possible alternative, which may save the contact scenario but does not imply a wholesale language shift, is to assume that a mixed frisophone-francophone population existed along the coast between the Rhine and the Zwin (or even down to Calais). Their interaction caused the coastal dialects of Franconian

to lose nasal consonants before fricatives and to reduce their unstressed vowels quicker than the inland dialects, obstructing the workings of *i*-mutation. This novel variety then spread to large parts of Flanders (but maybe not the Dender region, where there are slight indications for erstwhile *i*-mutation). This would thus be a non-shift scenario but under the assumption that the coastal Franconian dialects did change their phonological make-up under the influence of Frisian-Franconian bilingualism.

Whereas options (1) and (2) are implausible for the reasons mentioned, (3) seems a more promising solution. This does not necessarily mean that it is true, but it does allow for an unforced explanation of many facts, including the presence of a number of loanwords. We may start from an Early Medieval situation in which speakers of Anglo-Frisian or (subsequently) Proto-Frisian lived along the coast, where, from the mouth of the Rhine southward, they lived in close contact with speakers of Old Franconian dialects. Even though both varieties had been separated by two to four centuries of separate linguistic innovations, they may still have been mutually understandable. In the early trade centres in the delta of the Rhine, Meuse and Scheldt, and maybe elsewhere, the Old Franconian variety was influenced in some aspects by Proto-Frisian, even though it was the latter variety which eventually (ultimately in the ninth century in Flanders, and in the late eleventh century in South Holland) disappeared from these areas. The novel variety of Franconian, which we might call Old Coastal Dutch, and which featured among other things the unrounding of \**ü* in *Cj*-stems and nasal loss before fricatives, spread across all of Flanders, Zealand and South Holland in a relatively uniform way (leaving aside small differences, such as the timbre *i* or *e* for the unrounded outcome of \**ü*). This agrees with the fact that the area was a dialect continuum with a relatively low demographic density, which is a favourable circumstance for the large-distance spread of innovations. The land reclamations of the High Middle Ages (eleventh to thirteenth centuries) led to a rapid demographic increase and a higher number of local linguistic developments, causing the dialects of the different regions to grow apart.

## 22.4 General conclusion

This study stands in a long tradition of investigations into the possible Frisian backgrounds of aspects of the Dutch language, in particular, of its western dialects. It concentrates on the phonetic and phonological aspects of the comparison, since the nature of the available Old Dutch texts, the structural and genetic similarity of early medieval Frisian and Franconian, and the nature of linguistic change in general, all make the evidence from vocabulary, derivational morphology, inflectional morphology and syntax less reliable (see §1).

Of the linguistic phenomena discussed in the earlier literature, some changes in Dutch are here dismissed as evidence for a Frisian substrate or adstrate, such as the palatalization of *k* in diminutives, the palatalization of *g* before consonants, the unconditioned fronting of \**a* to *e* in all but a few words, the unrounding of \**ü* in open syllable (the type *krepel*), and the reflex *aa* of \**ai* in unstressed syllable (the type *scoutate*). Some other phenomena are indeed due to contact with Frisian, viz. as lexical loanwords from an early variety of Frisian into the coastal dialects (summarized in § 22.2 above). Finally, six (sets of) changes could be due to structural contact between Proto-Frisian and Old Franconian, such as the absence of *i*-mutation on vowels other than \**a* (leading to unconditioned fronting of \**u* and unrounding of \**iu*, among others), nasal loss before fricatives, and *h*-loss; see § 22.3.

The most likely explanation for the rise of the last group – if indeed due to language contact – is not wholesale language shift. We may assume the co-existence of frisophone and francophone speakers along the coast, leading to the gradual adoption of some Proto-Frisian features by the coastal Old Franconian dialects. The relatively uniform way in which the results of these changes spread across Flanders, Zealand, and Holland, points to an Early Medieval dialect continuum with a relatively low demographic density, favourable to a long-distance spread of innovations until the eleventh century. After that time, the economy and demography of the western Low Countries changed to such a degree that dialect change began to take on different forms, involving the creation of urban centres and the interaction between town and countryside. After 1200, the dialects of Dutch step into broad daylight.



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The Low Countries are famous for their radically changing landscape over the last 1,000 years. Like the landscape, the linguistic situation has also undergone major changes. In Holland, an early form of Frisian was spoken until, very roughly, 1100, and in parts of North Holland it disappeared even later. The hunt for traces of Frisian or Inguaeonic in the dialects of the western Low Countries has been going on for around 150 years, but a synthesis of the available evidence has never appeared. The main aim of this book is to fill that gap. It follows the lead of many recent studies on the nature and effects of language contact situations in the past. The topic is approached from two different angles: Dutch dialectology, in all its geographic and diachronic variation, and comparative Germanic linguistics. In the end, the minute details and the bigger picture merge into one possible account of the early and high medieval processes that determined the make-up of western Dutch.

